

The Vocational Guidance Quarterly

VOL. 10, NO. 1

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AUTUMN 1961

The Vocational Guidance *Quarterly*

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Message from the

PRESIDENT

Focusing on the near and the more distant view and also the far horizon, all at the same time, is an accomplishment we hope for in NVGA this year.

Prominent in the foreground of activities are preparations for the Chicago convention next April. The word from APGA headquarters is that it will be our biggest convention, and the caliber of the programs planned should make it a memorable one. We hope the Convention is in the forefront of your planning too (the dates will be April 16 to 19).

The Vocational Guidance Quarterly looms large in NVGA's activities now as always. With the present issue, we welcome Marty Hamburger as editor. He assumes this responsibility at a propitious moment, since we have recently had a pleasant piece of news about our magazine.

Hereafter, in recognition of its professional contributions, the Quarterly will be among the journals indexed in the Educational Index.

Another area in which we are making progress is the development of additional standards for occupational literature. A subcommittee of NVGA's Section on Occupational and Educational Information has completed a new "Guide for the Preparation of Industrial Careers Brochures"—de-



signed for use by writers and publishers of such brochures, by our Guidance Information Review Service in preparing evaluations of them, and also by individuals interested in applying the standards themselves. Anyone wishing a copy of the Guide may obtain it on request to APGA headquarters.

We are also happy to report the organization of three new Interest Groups—on Military Service (Dr. Joseph E. Barber, chairman), on Visual Aids (Dr. William D. Wilkins, chairman), and on Religion and Vocations (Miss Kathryn G. Cook, chairman). If you would like information about our present Sections and Interest Groups or wish to suggest the formation of a new group in another area of interest, please write to Evelyn Murray. As Coordinator of Sections and Interest Groups, she would be happy to give you any information and help she can.

In early October, your Board of Trustees met in Chicago to consider all phases of NVGA's program. You will shortly hear about the results of the meeting, as well as other Association activities, through a new mimeographed newsletter. The plan is to issue this newsletter twice a year hereafter, if you think well of the idea. A newsletter will make it possible to report on NVGA's many and varied activities in much greater detail than is feasible in this brief message.

Further ahead of us but already the object of much planning is NVGA's 50th Anniversary celebration in 1963. One of the major features of this celebration will be a special Anniversary Volume, tentatively titled "Man in a World at Work." Plans for this volume are progressing rapidly under the able leadership of Henry Borow, who is serving as editor. The volume will be a symposium, with contributions from many of the most creative members of the counseling profession and also from outstanding individuals in other behavioral sciences, who are particularly qualified to discuss the contributions of these sciences to vocational guidance. When the plans have crystallized further, you will

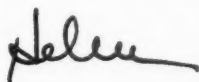
be hearing about them in detail. They are already so impressive that several publishers are bidding for the privilege of publishing the book! We hope and believe it will be a milestone in the development both of NVGA and of vocational guidance in general.

Our Anniversary will also be given appropriate recognition at the Boston convention in 1963, in programs and special features. Harold Cottingham has already assumed responsibility for NVGA's part in the 1963 convention plans, besides cooperating generously in other activities.

In the urgencies of this year's projects and next year's plans, it would be easy to forget the far view. Nevertheless, we intend to keep our sights on it in many activities and, most particularly, in the work the Commission on Structure and Membership will be doing under Win Scott's chairmanship. The charge to this Commission is to determine what changes, if any, in our Association would enable it to better represent and serve its many different groups of members.

One of NVGA's strengths and unique destructions is the diversity of its membership. Our Association brings together, through their common interest in the place of work in man's life, people in schools and colleges, in industry and Government, in private counseling centers and social agencies. Many are active counselors; others are supervisors or counselor trainers, research or personnel workers. It is NVGA's aim to offer to all its members opportunities for mutual understanding and broadened horizons and learning how we can help each other in a task of great concern to us all—aiding people in their vocational choices and development and hence in their life adjustment.

Sincerely,

A handwritten signature in dark ink, appearing to read "Helen", with a stylized, flowing script.

The Future of Work

GERARD PIEL

The following article is reprinted by permission of the Fund for the Republic, Inc. It consists of excerpts from Consumers of Abundance,¹ one of a series of Occasional Papers published by the Center for the Study of Democratic Institutions at Santa Barbara, California, as studies devoted to clarifying basic questions of our society. The special relevance of this probing and challenging paper to the profession of vocational guidance made it a natural choice as the first in a series of contributions from other fields and disciplines to The Vocational Guidance Quarterly.

THE ADVANCE of science has for many years been undermining the two pillars of our economy—property and work. Each at length has fallen from its place. Property is no longer the primary source of economic power, and ownership no longer establishes the significant, functioning connection between people and the things they consume. Work occupies fewer hours and years in the lives of everyone; what work there is grows less like work every year, and the less the people work, the more their product grows. In the place of work and property, illusions and old habits and compulsions now support the social edifice. Public understanding must eventually overtake this transformation in the relationship of modern man to his phys-

ical environment. Fundamental changes in the social order—in man's relationship to man—are therefore in prospect and are already in process.

It is difficult and perhaps dangerous to forecast where these changes may lead. Full employment, for example, now seems to be not only an unattainable but an outmoded objective of economic policy. What takes the place of wages in a workless society? If such a question must be asked, then others follow. Does profit remain a useful standard of accounting in a propertyless society? But these questions are not only too big; they are premature. Before they can even be asked, the scientific revolution that occasions them must be more closely examined.

As the withering of these institutions from the life of society suggests, property and work are artifacts of civilization. In the kinship economies of pre-agricultural societies they have no place whatever or appear only in the faintest analogues. The wampum hoard that confers prestige in one culture becomes the potlatch of another. Hunting and food-gathering are not work, but adventure, assertion of manhood, magic, and craft.

Property and work make their appearance with the agricultural evolution. They are devices for gathering and impounding the surplus that four families at work upon the land can now produce to support a fifth family off the land. Property is the institution by which the church, the state, and their individual agents assert their control over the land as one of the two primary factors of production. Work is the institution by which they as-

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¹ Single copies of the entire paper are available free from the Center.

sert their control over the other primary factor of production—energy of human muscle. The word “work” signifies toil and at the same time the product of toil; it is the measure (“according to his works”) of the portion of the product that may be allocated to the unpropertied worker. The two institutions together furnished the rationale for the compulsions necessary to assure the removal of the surplus from the land. Thanks to these arrangements, even fairly primitive agricultural technologies were capable of supporting substantial urban civilizations, as in Mexico.

Subversion of Work

Modern industrial technology produces a vast material surplus of goods, many times greater than the need of the workers engaged in producing it. That surplus goes begging for consumers because technology has subverted the social institution of work. The subversion of work began, of course, with the displacement of the biologically generated energy of human muscle by the mechanically generated energy of steam engines. The reciprocal steam engine gave way after little more than half a century to the steam turbine, the generator of electrical energy in the huge quantities that are measured in kilowatts. Studies conducted many years ago, when muscles were yielding a day's work to steam, showed that one man can put out about 48 kilowatt-hours in useful work in a year. On that basis, the 750 billion kilowatt-hours of electricity generated in the United States puts the equivalent of eighty-five slaves at the disposal of each man, woman, and child in the population.

But this is an old story. The new story is the disemployment of the human nervous system. In industrial production the function of the human worker has been to set the

tool, start up the machine, supervise its performance, correct its error, and keep its parts in working order. The machine has been doing all the work, including work that exceeds human physical capacity. But, for lack of a nervous system, it has had to depend upon human beings to regulate its operations.

The robot, or artificial nervous system, is the steam engine of the present phase of the industrial revolution. Unlike the steam engine, it does not announce its presence by huffing and puffing, and it has no easily recognized anatomical structure. But it does have a single underlying principle, which is as clear-cut and universal as the idea of converting heat into mechanical energy. This essential idea is known to engineers as feedback.

Feedback is the principle that underlies all self-regulating systems, including living organisms. The nearest and simplest example of feedback in action is the household thermostat: A mechanical sense organ absorbs a little of the heat generated by the household heating plant and thereby makes a measurement of its output. This small fraction of the output is fed back in the form of a signal to correct the input of fuel to the heating unit. By this feeding-back of output to input, the household heating plant is made to regulate itself.

Now, the principle of converting heat to mechanical energy is embodied in about half a dozen economically important heat engines—including the steam turbine, the internal combustion engine, the gas turbine, and the rocket engine. The feedback control systems in our economy, on the other hand, appear in a host of species and varieties—electrical, electronic, pneumatic, hydraulic, mechanical—and in such diversity of design and appearance that they have only the essential feedback principle in common.

An accurate census of these robots has not been made. But the evidence is strong that they now outnumber the human workers employed in industry. Our entire energy economy—from the steam plant out across the high-tension lines to the rotating machinery of industry—is now subject to automatic control. Our petroleum refineries and almost all of our chemical process plants are today so highly robotized that their entire operations are controlled by one or two human operators stationed at the central push-button control panel. It is only a few steps from here to the fully automatic factory.

Obviously, the purpose in designing the automatic petroleum refinery is not to replace the one or two human operators who still remain on the payroll. This was the naive idea of a Middle Eastern petroleum prince for whom an American oil company was building a refinery not long ago. Out of consideration for the underemployed *fellaheen* who were to squat in the sand outside the refinery fence, he asked whether jobs might not be created by disengaging the robots from the valves. The engineers took him seriously enough to reexamine the entire control system. They had to conclude that no team of human beings could be trained and coordinated to do its work.

Automatic Controls Revolution

So, also, the dial telephone, with the ramifications of direct long-distance and direct inward dialing, is designed not to save the wages of human female telephone operators, but to make the operation of the modern telephone system possible. The heart of that system is not the dial on the telephone but a computer in the central station known in the telephone company as the "line marker." Its self-regulating internal circuitry is so complex that its designers cannot tell at any

given moment just which elements in it are performing the work at hand. The American Telephone and Telegraph Company estimates that, at the present rate of traffic, it would have to employ all of the women in the labor force, plus 20 per cent more, to do the work of its line markers. The task of coordinating the output of that many human nervous systems in a single telephone system is quite impracticable.

Thus far the impact of the automatic control revolution upon the industrial payroll has been felt most acutely by the production worker. Until about twenty-five years ago, the ranks of skilled and semi-skilled factory hands were the growing element in the labor force, absorbing the inward migration from farm to city. In the last ten years, however, as the index of manufacturing output has climbed from 75 to 110, the number of production workers has hovered around 12,000,000. It is evident that the number is now due to decline. In the electrical industry, for example, production employment shrank by 10 per cent in the six-year period from 1953 to 1959; during that same period production in this industry increased by 20 per cent. Even more striking records have been made by the larger units of the industry. In three years, from 1956 to 1959, the General Electric Company increased its output by 8 per cent and at the same time reduced its production payroll by 25 per cent. Its non-production workers now outnumber those on the factory payroll proper. Corresponding trends are to be observed in other industries. After the last retooling, the auto industry produced more units than ever before, and yet the auto cities of Michigan were rated as distress unemployment areas throughout the year of peak production. Projection of these trends into the future shows factory workers becoming as

scarce as farmers toward the end of the century.

Vocal union organizations imbued with the Luddite spirit have made the public uncomfortably aware of these developments in recent years. Less is heard of what must be the already considerable impact of the white-collar computer. This movement has only just begun. Since typewriters furnish all the necessary linkage, it is clear that the liberation of white-collar workers from their routine tasks is due to proceed at a much faster rate. Again it should be emphasized that the object is not labor-saving alone. With a computer to do the job, all the many records kept by a corporation become a deck of punched cards or a length of magnetic tape that serves as the single record for every function from inventory control to the computing of a salesman's bonus. Herbert A. Simon, of the Carnegie Institute of Technology, has pointed out that the computer so programmed is not merely a clerk but stands ready to assume a large portion of the functions of middle and top management. As a decision-maker, the computer can subject much larger masses of data to more sophisticated analysis in much shorter periods of time. Not only does it know the theory of linear programming better than most of our highest-paid executives; it can also learn from experience to improve its performance in the managerial function.

More Goods, Less Work

From decade to decade, the American economy has adjusted to the subversion of the social institution of work with flexibility and something of the same inventiveness with which it has absorbed the consequences of the subversion of property. One man-hour of work today produces what it took three man-hours to produce sixty

years ago. This means that we could be producing the same national product as in 1900 with one third of the 1900 labor force. That would leave 58,000,000 members of the present labor force unemployed. But, of course, the American people have elected to apply their rising productivity to the production of a much larger volume of goods, about six times as much as in 1900. A major part of this vast increase in output is represented by products not dreamed of in 1900. In other words, the workers disemployed by rising productivity in the old industries have been absorbed in new ones to produce an expanding variety of goods or in entirely new functions created by the flow of abundance.

They could be producing goods in even greater volume if not variety today, but they have chosen to take a substantial portion of the gain in leisure. With the work week shortened from around sixty hours to forty hours, the much larger 1960 labor force is putting in a total number of man-hours that is only 40 per cent larger than that worked by the 1900 labor force. If the sixty-hour work week still prevailed, only 40,000,000 workers would be needed to produce the 1961 national product and some 27,000,000 workers would be unemployed.

This invention—the spreading of the same amount of work over the larger labor force by giving everyone less work to do—constitutes only one of the measures so far evolved to handle the problem of distribution. Moreover, it should be distinguished from the desperate share-the-work measures taken in the Great Depression, because it does not involve sharing the wage.

On the contrary, the portion of the national income going to the labor factor—that is, compensation of employees as against profit, interest, rent, and so on—has risen

slowly from 53 to 73 per cent since 1900. Some substantial portion of this shift must be attributed to the decline in the number of proprietors, large and small, especially in agriculture. That the shift also reflects a gain on the problem of distribution becomes clear, however, when it is considered in connection with the way the total income is shared among the income groups. Since 1929 the share of the national income going to the most fortunate fifth of the nation's families has shrunk from 55 to 45 per cent. Almost the entire 10 per cent subtracted from the income of the top fifth has gone to the three middle fifths, improving their relative position by about 25 per cent.

This redistribution of purchasing power is another important factor in reducing the amount of work people do in the course of their lives. It makes it possible for young people to postpone their entrance into the labor market through high-school and even college age, and it takes workers out of the labor market by voluntary retirement at the other end of their careers.

But the shortening of the work week and the working life still leaves untold the real story of how work has been spread in order to secure the spread of purchasing power. If work is defined with any sort of strictness to mean productive work—that is, the extraction of raw materials and the making of consumable goods from them (farming, mining, manufacturing, building, and transportation)—then less than half of the labor force, only 25,000,000 people, are really at work.

Thus, up to the present, the American society has managed to handle the subversion of the institution of work without undue stress upon the system of distribution that has carried over from the days of scarcity. Work, the illusion of

work, and pleasant substitutes for work furnish an expanding population with the purchasing power to consume an ever more rapidly expanding volume of production. For most of the past twenty years employment has been "full."

It now appears, however, that the advance of technology has begun to outstrip our capacity for social invention. Before the second World War, in the flux of technological change and the oscillations of the business cycle, the system chronically fell 5 or 10 per cent below full employment and fell as far as 25 per cent below in 1933. It is instructive to compare this experience with the present. During the past several years, despite a steady rise in gross national product, unemployment has been rising. Each wavelet in the now well-damped business cycle has left a larger number of workers high and dry on the beach. Unemployment now approaches 6,000,000 or nearly 10 per cent of the labor force (mid-1961). But this figure seriously understates the gap between the jobs available in the production and distribution of goods in the economy and the number of people who need employment in order to be able to purchase their share of those goods.

Trends Accelerating

The evidence that full employment is no longer an attainable objective seems to be growing. Of course, the arms budget can be arbitrarily increased, and the size of the armed forces along with it, to offset technological disemployment in the armament industries. But no one really wants to contemplate an indefinite continuation of the arms race. Alternatively, or concurrently, some of the slack can be taken up by a thirty-hour work week, a measure advocated by both presidential candidates as long ago as 1956. After that, the work week could be reduced to twenty-

five, then twenty hours—and the inefficiencies inherent in such a short work week would help to create more jobs. At that point the nation will have come really close to being a workless society.

No reasonably predictable rate of growth in the productive sectors of the economy seems equal to overtaking the current rate of technological unemployment. Every step of progress in automatic control reduces the capital investment as well as the employment per unit of output. As the cost of investment goes down, the rate of technological progress must increase and with it unemployment. Even an expanding economy must employ progressively fewer workers in its productive sectors. At some point the terminus of full investment will be reached; even at the present level of opulence, the consumer economy shows signs of surfeit. There is, of course, a vast untapped market in the income groups at the bottom third of the economic pyramid. But how are their wants to be implemented with purchasing power when that bottom third already counts the disemployed among its members?

In the long run, larger questions must be asked and answered. If a fraction of the labor force is capable of supplying an abundance of everything the population needs and wants, then why should the rest of the population have to work for a living? Preposterous alternatives come forward: give-away programs on television suggest that television might be employed to give the abundance away instead of trying to sell it. If production cannot be maintained at a profit under such circumstances, then why should a profit be made? Some other standard of accounting might serve even better to reduce waste and inefficiency.

Abundance Vs. Hard Work

These questions are put in a deliberately extreme form. They suggest the kind of overturn in the values of our society which is already quaking the ground beneath our feet. The virtues of hard work and profit are rooted in scarcity. They have no relevance to the economics or the sociology of abundance.

Any hard work that a machine can do is better done by a machine; "hard" these days means mostly boring and repetitive, whether in the factory or in the office. But the instinct for workmanship, the need to feel needed, the will to achieve, are deeply felt in every human heart. They are not universally fulfilled by the kind of employment most people find. Full employment in the kind of employment that is commonly available, whether blue-collar or white-collar, has been plainly outmoded by technology. The liberation of people from tasks unworthy of human capacity should free that capacity for a host of activities now neglected in our civilization: teaching and learning, fundamental scientific investigation, the performing arts and the graphic arts, letters, the crafts, politics, and social service. Characteristically these activities involve the interaction of people with people rather than with things. They are admittedly not productive activities; nor are they profitable in the strict sense. But they are highly rewarding to the individuals involved and add greatly to the wealth of the nation. There is no question that our population numbers increasing millions of people qualified for such functions; our institutions of higher learning will have an enrollment of 6,000,000 before the decade is out. The nation's principal economic problem has become that of certifying its citizens as consumers of

the abundance available to sustain them in tasks worthy of their time.

What disturbs the scarcity economist, of course, is that such certification is likely to be provided by the public payroll. It must be recognized, however, that these activities—along with urban rapid transit, the enhancement and conservation of natural resources, public works, the best kind of medicine, the operation of museums, and so on—have never been or can no longer be conducted at a profit. Most of these activities and institutions are now short-changed. With abundance to support the expanding portion of the population engaged in them, we may anticipate that they will assume a higher priority in our civilization.

In any event, so long as the institutions of work and property pre-

side over our economic activities, it is clear that the distribution of material goods will be achieved as it has been in the past, by expansion of the "non-productive" payroll in both the public and the private sectors of the economy. The "peace corps" and the revival of the conservation corps proposed by the Kennedy administration are the latest steps in this direction. There is plenty of need, if not demand, for labor of this kind. A really adequate program of assistance to the under-developed countries might engage large numbers of disemployed factory workers in teaching their skills to people now entering on their industrial revolution. For some time to come, we can be sure, the real work that remains to be done in the world will stave off the specter of universal leisure.

The following poem, published almost 60 years ago, is a reflection of attitudes toward work which presumably permeated American life for a long time.

WORK

Henry Van Dyke

Let me but do my work from day to day,
In field or forest, at the desk or loom,
In roaring market-place or tranquil room.
Let me but find it in my heart to say,
When vagrant wishes beckon me astray,
"This is my work; my blessing, not my doom;
Of all who live, I am the one by whom
This work can best be done in the right way."
Then shall I see it not too great, nor small
To suit my spirit and to prove my powers;
Then shall I cheerful greet the laboring hours,
And cheerful turn, when the long shadows fall,
At eventide, to play and love and rest;
Because I know for me my work is best.

New Emphases in Vocational Guidance

RACHEL DUNAWAY COX

THE mid century has brought such extraordinary development in so many areas of human endeavor that our times could with accuracy be called the age of expansion—if not explosion.

This is truer of science and technology than of the social sciences for we in those disciplines are bound to confess that we have not achieved the tangible changes in the conditions of human life which have been wrought by chemistry, physics and their applications. But we have had our revolutions too.

We are still assimilating the discoveries and generalizations of Freud concerning the minds of men. In extending his theory we stand on the brink of a new period of discovery, as depth psychology gropes to consolidate forces with learning theory in the effort to understand thinking, imagination, and problem solving. The psychology of perception, long the exclusive preserve of the laboratory scientist, is being enriched by infiltration from the field of personality. Study of the child by clinicians and academic psychologists takes on new depth through the contributions of sociology and anthropology. New dimensions in guidance are opening up in much the same way.

All the specializations within the "helping professions" have been the beneficiaries of the new and deeper understanding of human emotion and behavior. Vocational guid-

ance is no exception. New lines of thought and new skills have emerged during recent years.

Some of the new emphases are philosophic. Others have to do with method. Burgeoning ideas and refinements of skill have opened stirring avenues to professional guidance workers and at the same time made available to counselees far more competent counseling. This paper will discuss three of these new developments.

Success Criterion Changed

The first of these emerging ideas is a growing dissatisfaction with the older notion of success in a vocation. In a word, this is the moving of the criterion of success from an outside criterion to an inside criterion. Studies of the 1920's and 1930's defined success in terms of earnings, units produced, time of staying on a job. And the definition of Vocational Guidance expressed by NVGA was "to assist the individual to choose, prepare for, enter upon and progress in an occupation."

The emphasis, as Donald Super points out, was to compete effectively, prepare so that one can do work, get a foot-hold in the field and advance in the field. This definition and the attitudes of those who drew it up were not hostile to a more person-centered, as opposed to an employment-centered, notion of success and of guidance.

The new point of view, however, as expressed quite explicitly in the work of present day leaders, comes closer to where the individual lives—sees his individual fulfillment as

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a worthy and indeed as the central issue. To be sure, success for the individual will probably involve maximum social gains, but it makes quite a lot of difference where you put your emphasis. Donald Super makes the point well:

"Perhaps it is unwise to use the term success, since in American culture success is so often measured by achievement. One tends to forget that success is not only a social or objective matter, but also a personal and subjective matter. 'Success' as the world judges it, is fruitless and empty unless it is also seen as success by the individual himself. What would wealth have been to Ghandi or the love and respect of humble men to Bismarck? What use had Thoreau for prestige and status, or Theodore Roosevelt for opportunities to be alone with himself and the universe? In the eyes of each of these persons, and of some others, each of them was successful; but in the judgment of some others, each of them was a failure, however famous he may have become."¹

This then is the newer notion of success. We no longer need to "bootleg" it into our individual dealings with young people out of compassion and deep wisdom. We openly assert it as one criterion of success. Does the occupation give the individual the sense of fulfilling his unique destiny?

Developmental Process Noted

A second important emphasis is that which views the work life of the individual as a coherent developmental process. In this view the series of engagements almost every individual has with the world of work is not a disjointed fumbling and floundering until the individual eventually settles down into the occupation with which he stays for twenty, thirty, or forty years. Rather, each step from the first paper selling or cherry picking in childhood, through summer jobs in

college, the sequence of jobs afterwards, the longer period of steady drive toward higher levels of competence in one line—all these make a sensible pattern as the individual grows vocationally.

Not long ago the feeling among guidance people—and certainly among parents—was that the only really desirable course was for a young person to find his direction quite early, and settle into it as a life-time proposition. There was much to be said for such a career pattern since it saved time and motion.

Yet careful study of what people actually do—including the highly successful and happy—shows that there is a surprising amount of shifting about especially during the early years. On the whole we used to take quite a dim view of this. Early studies of vocational choice have referred to these shifts and changes as the "period of floundering." A change in philosophy is reflected in the new term we give this early period. Now it is called a period of exploration.

Recently a group of ten or twelve friends sitting around at a dinner party began discussing their own career sequences. All were highly trained people with not less than four years of college, most with eight or more. Only one of those people was presently engaged in the calling upon which he or she set out as a beginning worker and which he had confidently expected to follow from then on. Interestingly enough they did not feel that they had made serious mistakes. Some detours, yes, some "waste" motion, yes—but not serious error. They had simply changed.

In so doing they and many like them have carried some of the former job into the new. The man trained in electrical engineering becomes head of personnel in a big manufacturing concern; the man

with one graduate degree in Economics turns to law and becomes legal counsel for an extensive cotton firm, a responsibility in which his economics training is invaluable. A sociology teacher finds his way into labor conciliation.

These specialized emphases within larger fields are not as surprising as complete divergencies—such as the lawyer or engineer turned religious leader; the newspaper man turned history professor. Yet these shifts too take place. And these workers feel they are more richly prepared to function because of this broader experience. The fact is that even today when specialization seems the only way to “get ahead,” people are still making shifts of this sort and are making significant contributions as well as finding job satisfaction—in many instances because of the shifts.

The emerging attitude in vocational guidance is that such changes and shifts represent a normal and desirable progression—a normal aspect of the life-work. As Super says, continuity of the career is not merely stability in the job. On the contrary, it consists of the development of the career along lines that are consistent with the individual's past life and with the development of his personality.

Does the notion of progression and change mean that we may as well leave the individual to his own devices since we may not be able to name the end goal by our predictive instruments applied to the individual of eighteen or twenty? Far from it—for the employment picture is much too complex for the unguided youth ever to find his way effectively even at the very first steps; and the aptitude and training necessary for the intermediate goals are almost always uncertainly perceived by him.

Certainly he needs to know his own potential and the direction in

which he may travel with some hope of attaining competence and of finding a hospitable employer. He needs to know what kinds of persons appear to find satisfaction in the general direction he hopes to take—and how he compares with them. It is no inflated boast that guidance people can give him all this, validly and reliably, and that in the light of this he can make short run plans which will leave open doors to a not yet clearly perceived future.

But the new and more relaxed attitude about shift and change does mean that we will orient our counselees to a world in which change in role may be desirable because changes either in the social picture or in their own changing levels of maturity may bring to light desires, abilities, goals, and opportunities no one could predict or foresee.

The development of a career is not unlike a mountain climb. You want to reach a certain summit and with some direction from those who have already made the climb or at least part of it—you set out. After a long slog you see what you believe to be the goal as the ridge after the next ridge, so you gird your courage for those last two rises. But lo! When you have attained the first of the last two, the summit is not the second ridge at all but something more distant, more beautiful but also more commanding than anything you had dreamed.

Now the vocational counselor, because he is a cartographer of careers, might have told us that the summit lay where we at length discovered it does lie. But let us guidance people confess it: there are some mountain peaks even we do not know will be there to be climbed when our counselee gets to the general vicinity (witness the new career of programming the

electronic brain); and, for all our know-how, some individuals develop strengths and talents we could not with any certainty predict. We, too, are mountain climbers who know a lot about work possibilities and about people but we are neither gods nor seers. We, too, need to go on climbing.

Personality Patterns Revealed

A third new emphasis is that of the relation between choice of vocation and the personality of him who chooses. In this new emphasis vocational guidance is being reinforced and enriched by fascinating research findings from clinical psychology.

Anne Roe's studies of the personality patterns of biologists and artists reveal that the individual's choice of vocation seems somehow to be related to what that individual is at the deeper, as well as at surface levels. Her work reveals that identifiable kinds of personality structures, life histories, marriage adjustments are found in certain occupational groupings.

It is interesting to speculate concerning what new understanding of worker satisfaction we might achieve if studies such as Roe's are pushed further. Certainly light ought to be available from such studies upon the way in which workers stay with or move away from a specific employment, develop happily in it, stagnate listlessly, become social malcontents, or break down entirely.

Her findings suggest why some placements which seemed at first blush so good turn out poorly. They suggest not only that the worker explored a job and found it distasteful but quite as surely that he had explored himself and discovered something new about himself.

As one looks back over his own job experiences he is probably able

to recall how when his personality was placed in the context of a job he discovered some things about himself of which he had not before been aware. And he may remember, too, some effort to bring his own person into line with the demands and climate of the job.

The achievement of a "better fit" between worker and job comes about partly through changing one's self. But this can go just so far before the individual begins to feel pushed and pulled out of shape. Loyalties within the self cannot be violated; talents and inclinations can be stretched just so far before the mutual pain of employee and employer becomes intolerable! When this occurs, a job change must be made.

After a pretty good approximation of "fit" is achieved, the worker takes on attributes of the work and the job becomes, in a sense, an expression of the worker. It has been said that husbands and wives who have lived together a long time get to resemble each other. In general outlook they certainly do, and even in facial expression they sometimes seem to do so. Just so, the worker in harmony with a job that has a clear cut pattern will grow into a likeness of the person who can do well in that job.

We probably are safe in saying that the garment of the job and the person who wears the garment become more compatible. It is in the nature of jobs that much of this comes about through the person's finding the job into which he can fit with reasonable comfort.

We wonder sometimes why it takes people so long to find out what they *are* in relation to jobs and why so much exploration seems to be necessary. Unquestionably one reason is that growth is still going on during the early years and the outlines of what one will become are not yet clear. It is true too that the young person is so

much engaged in establishing himself as different and separate from his parents and as a separate economic self that he is as much concerned with his difference from, as in what he really is.

It is in the area for self-discovery that a vocational service may fill one of the most pressing needs of the young person. In the guidance setting where there is less need than in the presence of parents to assert what one is not, he is better able to get in touch with what he really is. The counselor can help him to make conscious his unformulated aspirations and can free him to make conscious contact with the values which have meaning for him.

This cannot be done point blank by a simple telling. But it can and is done through skillful use of the counseling process.

Interestingly enough these deeply meaningful values will in the vast majority of cases be values that have been meaningful to his parents. Not what parents have said, but what parents have felt. What things were important to them? For what did they make sacrifices? In what did they take spontaneous pleasure? Children are not fenced in by their parents' specific likes and dislikes but the underlying value system of the parents is very likely to be built into the child. It is this value system that will need to find expression in the life of the son or daughter.

Through skillful guidance, as the counselee moves toward a deeper understanding of himself and hence toward a suitable vocational choice he is, with the help of the counselor, able to perceive what he really wants for himself and from himself.

The use of a series of counseling sessions is only now developing as an accepted aspect of vocational guidance. For we have heretofore almost universally interviewed, tested, and interpreted and sent the counselee on his way. But today we are beginning to take more responsibility in helping the counselee get into touch with his own values. The focus here is upon the *meaning* of vocational choice for the individual—not merely upon the *fact* of choice.

In this we are borrowing skills and insights from social case work and clinical psychology. As in all borrowing there will need to be adaptation to the new setting and the different aims of vocational guidance. We have much to learn as to how this can best be done—but the enterprise challenges us on to that next ridge.

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True, there is a tide in the affairs of men, but there is no gulf-stream setting forever in one direction.

JAMES RUSSELL LOWELL

Varieties of Unmotivated Clients

ALFRED L. BROPHY

Virtually every counselor has had experience with clients who seem not to desire help. Such instances are likely to be particularly frequent if the counselor regularly conducts screening interviews with all members of the group he serves or if his clients are otherwise not self-referred. Depending partly upon the counselor's philosophy of personnel work and partly upon other demands on his time, he may handle such resistant clients in an extreme fashion, either by trying to persuade them directly of the value of his services, or by dropping them outright from his caseload. Since other approaches to these clients are possible, it may be helpful to identify a variety of bases of low motivation in vocational counseling clients, so that the counselor can respond to a particular unmotivated client in accord with his understanding of the reasons for the client's aloofness from the counseling process.

Self-Directive Clients

A first category of persons who appear unmotivated for counseling is composed of those who are able to cope with whatever problems they may be facing and who, thus, realistically do not need help. Counselors, in their enthusiasm for counseling should not fail to recognize that some people are well prepared, by reason both of emotional maturity and of knowledge of themselves and of their environment, to manage their lives without professional assistance. The counselor will, in these cases, usually wish to

let the client know that counseling will be available to him at a future time if he should desire it (5, pp. 87-88).

Non-Planners

A second category of clients may be unmotivated for counseling mainly because they are not oriented toward planning and see nothing to be gained by planning. These are the people who think in terms of "a job," and whose implicit theory of occupational choice attributes most influence to chance factors (1, pp. 18-21). This viewpoint is more common among lower-class than middle-class members, and it may be relatively frequent among women, at least with respect to planning in the occupational sphere. Such an attitude is also occasionally adopted by persons who have been chronically disappointed in past plans, and who accordingly resolve not to make plans at all in the future. While the middle-class counselor must be wary of imposing a value such as planfulness just because it is a middle-class characteristic, the fact is that a simple chance theory of occupational choice is not tenable. As Super (3, Ch. 20) has shown, many of the apparently accidental factors can be evaluated and utilized in vocational counseling. Perhaps the counselor can lead some clients in this category to recognize that one can understand and overcome some of the supposedly chance factors, and emerge with plans that lay the ground for a happier work life. Often, however, such movement would require greater reorganization of cultural values than will be possible.

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"Rugged" Independence

A third category of clients who resist involvement in counseling comprises those who feel that they *must* go-it-alone. In contrast to the first group of clients, who *can* make it on their own, these people *have* to do it themselves. They betray a fear of the counseling process and try to disengage themselves from it as rapidly as possible. The strain that they show in this struggle reveals a fear of becoming dependent, based most often on strong unrecognized dependency needs that the counseling relationship threatens to bring to light. Persons like this may accept test-centered or information-centered help, while they would only be alienated by relationship-oriented counseling with its temptation to give in to the strong desires for passivity and dependence. The counselor should probably be prepared to offer the more rationally oriented assistance, if that is accepted, even though he recognizes that the client might ultimately profit greatly from change in the underlying traits.

Other Defenses

Another group of clients reject counseling not because of the threat that counseling will uncover their dependency needs specifically but because of the more general threat posed by the encouragement of introspection. These clients are fearful of being led to evaluate the accuracy of their self concepts, which are being maintained by tenuous or rigid defenses. Again, information-centered counseling may be of some help, and by "holding" the client in counseling may possibly result later in less fear of reflection and self-exposure.

A fifth category of clients are especially eager to receive advice from the counselor, whom they cast in the role of expert-adviser, though

they reject the more comprehensive forms of vocational counseling. They appear unable to assume responsibility for directing their own lives, and desire to undergo evaluation and then to receive prescriptive advice from the counselor, without becoming involved in the counseling process. These clients, like those in the third category, tend to have strong dependent needs, the difference being that here the dependent needs are expressed directly in behavior. The counselor can help by structuring the relationship by his own behavior in such a way that the client does participate in the process without being overwhelmed. Many of these clients can be led to see that outside diagnosis and advice are not adequate without consideration of their own self-evaluations and goals. Thus, although their dependent needs remain intact, they can be encouraged to contemplate pertinent determinants of vocational adjustment from their own point of view as well as from the counselor's perspective.

A sixth group of clients who reject counseling do this as a way of underscoring their sense of inadequacy and low self-esteem. It is as though they were to say, "I am so weak that I have no business engaging in a process that will result in undertaking responsibilities." When this feeling is not marked, the client can be eased gently into counseling, in which the counselor may for a time accept much of the burden of direction of the discussion. But persons who have severe emotional problems and a very serious defect in self-esteem may be unable to take any steps that would involve the assumption of responsibility, and it will be necessary to postpone vocational counseling and to institute other therapies. Such cases in which the rejection of counseling represents a marked de-

fensive regression will be rare in the practice of most vocational counselors.

The Unready Client

A final group of clients appear unmotivated because they have not yet reached the maturational level for being actively concerned with occupational planning. Sanderson has stated that "for many adolescents planning their future does not constitute a particularly meaningful emotional experience" (2, p. 298), and has explained this as due to the adolescent's optimism, his tendency to regard the future as extremely remote, and his limited experience in making his own decisions (2, chs. 10-11). Super and Overstreet (4) have provided evidence that ninth graders are unprepared to make specific occupational choices, both because of lack of information regarding duties and conditions of work in their preferred occupation and because intellectual level and inventoried interests are often out of line with their preferred occupation. If a young adolescent client is not interested in formulating a specific occupational choice, this may, therefore, be a desirable situation, and the counselor can offer other services, such as Super and Overstreet suggest, that allow the client to broaden his understanding of vocational development and that foster readiness to make later choices. On the other hand, with the increasing social pressures to make early choices, the counselor is often faced with adolescents who feel the need to make decisions that are actually premature. This situation is in many ways just the reverse of that of the unmotivated client. Here the counselor's task is to forestall decisions that would limit the op-

portunities for future changes in preferences, while at the same time encouraging planfulness.

In conclusion, uninvolved involvement in vocational counseling may have any of a number of meanings, some of which have been reviewed above with brief suggestions as to how the counselor can handle them. As a general recommendation in dealing with unmotivated clients, it may be said that the counselor should accept the client as the client sees himself and as he views his goals in counseling, while also providing to him the opportunity to formulate other goals for their work together. After assisting the client to the extent of his interest in working through his problems, the counselor should make it understood that the client is welcome to return, without implying that further contact will definitely be necessary. The counselor should respect the client's right to be free of counseling (not much is likely to be accomplished through imposition of this service anyway), while at the same time making it possible for the client to explore what may be achieved through counseling.

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The Procrustean Counselor: Myth or Reality?

LAWRENCE BEYMER

IN ANCIENT GREECE, the story goes, a monster named Procrustes was operating from a mountain top near the main road from Eleusis to Athens, falling upon innocent travelers, making them his prisoner, and taking them to his hideout above the clouds. There the captives were tied to an iron bedstead which, for some strange reason, never seemed to be the same length as the prisoner. Procrustes had a novel solution for this phenomenon; if the captive was shorter than the bed: stretch him to fit it. If too long, cut off the projecting portions. The effect upon the poor prisoner was unfortunately the same in either case. Eventually, Theseus slew Procrustes in the same manner and became a great hero.

Allegorically, such a situation exists in our country today. True, we have no giant highwaymen lurking near our freeways, but there is much evidence of Procrustean methods being used in our midst. Modern Procrustians lie in wait for children traveling through our system of public education. They operate not in a cave on a mountain top, but in our schools behind doors marked "Counselor." It is not the victim's limbs which are stretched or lopped off here, but their attitudes, ambitions, and value systems. In any Procrustean atmosphere, the views of the captive must be either cut down or extended to meet the pre-conceived standards of the captor.

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No plot exists here to imply that all counselors function on the basis of Procrustean methods, but we cannot overlook the growing evidence that many of them do. Examine the image of the school counselor as it appears in the popular press. A leading national magazine recently published an article on counseling in high schools, and gave the following description of the power of the school counselor:

"He can salvage young lives by clearing up their befuddlement and directing them toward a logical future." [1]

This article goes on to make the verb "to convince" a more-or-less automatic predicate for the noun "counselor." Is a counselor a convincer? The Gilbert Youth Research Corporation seems to have accepted this definition, but does not seem to be very happy with it:

"Do you want to be told what career to pick? Most teenagers apparently do. In a cross-country survey, we have just discovered that nearly a half of the 1,072 young people we talked to are convinced that they have had too little career guidance. Only a tenth consider that too much advice has been thrust upon them. . . . IN SEEMING CONTRADICTION TO THE QUEST FOR GUIDANCE is the general feeling among young people that they are quite capable of making their own decisions. PERHAPS THEY JUST CRAVE INFORMATION AND ADVICE, NOT INSTRUCTION

OR DEMANDS." [2]* Obviously someone is confused here, and it is not the young people who were interviewed.

The respected Conant Report on the American High School Today is very clear in its definition of a counselor's duties:

"The function of the counselor is not to supplant the parents BUT TO SUPPLANT PARENTAL ADVICE TO A YOUNGSTER." [3]

Is a counselor an advice-giver? What fantastic implications are inherent in an affirmative reply! In another section the following appears:

"For instance, the guidance department must have as its policy that parents who want their children prepared for colleges FOR WHICH THEY OBVIOUSLY ARE UNSUITED WILL BE RESISTED. Such a policy does not mean that students will be barred from attempting preparation for those colleges, but it does mean that IT IS THE DUTY OF THE COUNSELORS TO DO ALL THEY CAN TO DEFEND STUDENTS AGAINST THE UNREASONABLE ACADEMIC DEMANDS OF THEIR PARENTS. . . . The same principle applies to OTHER UNREASONABLE PARENTAL PRESSURES THAT MAY ARISE, among which a common one is the request that students be allowed to be absent from school for a longer period than the regular holiday in order that the family may have a more extended vacation period. [4]

The Procrustean-counselor has no difficulty here. To him it is obvious which students are "obviously

unsuited" for a particular college. In this matter he claims more competence than most researchers who have studied this problem. Furthermore, just what is meant by "resisting" parents, and "defending" students? And are the duties of a counselor similar to those of a vice-principal and the attendance officer?

John Hersey, in his satirical book *The Child Buyer*, has one character describe the local guidance director-counselor (affectionately referred to as the "G-man") as follows:

"He does people favors; he is solicitous; he helps people plan their futures; he drags confessions out of them; he terrifies them with psychiatric 'insights'; he lends them money, serves them cocktails, tells them secrets, flatters them with intellectual argument. He also knows how to manage people by getting the goods on them." [5]

These few examples are but a sample of the confusion that seems to exist concerning the public's definition of a counselor and what a counselor does. But among these descriptions and among counselors themselves it is possible to identify at least two types of counselors who might justifiably be called Procrustean in approach.

The "Boss-Counselor"

The first might be called the "Boss-Counselor," typically a newcomer to the field, swept into guidance and counseling by the current wave of favorable public opinion. The Boss-Counselor rarely has much training other than that for classroom teaching, where he or she typically has been exacting, stern, and authoritarian in approach to students. The Boss-Counselor knows exactly what the job is that has to be done. Bright kids must be located and pigeon-

* All capitalizations in quoted references are by the present author.

holed in the college prep curriculum. Less academically-talented scholars are to be side-tracked into vocational training. Students are to be encouraged to prepare for those occupations which are termed "shortage fields." Educational and vocational decisions and plans are reviewed by the Boss-Counselor, who judges their appropriateness, either encouraging or discouraging their implementation. If the student seems lacking in ideals, ambition, or has a blind spot in his value system, the Boss-Counselor stands ready to impose his or her own into the void. If the student has not yet made a decision, the Boss-Counselor winds up students, chooses a direction, and gives them a push. As a rule, the Boss-Counselor depends upon persuasion, playing the part of a benevolent dictator or kindly monarch who cannot stand for his subjects to be unhappy or make a mistake, so he or she solves their problems for them. The Boss-Counselor has not read, nor could he understand these lines by Anne Morrow Lindbergh:

"Him that I love, I wish to be
Free
Even from me." [6]

But if persuasion fails, the Boss-Counselor brings out the heavy artillery of direct, deliberate coercion. Those who cannot be influenced become subject to control and direction against their will.

The "Manipulator"

The second type of Procrustean-counselor is harder to detect, and is, therefore, potentially more dangerous; this type can rightfully be called the "Manipulator." The difference between the Boss-Counselor and the Manipulator lies not so much in goals but in methodology. Where the Boss-Counselor imposes direct control and public

obedience, the Manipulator functions via a secret and impersonal exercise of power. In the words of C. Wright Mills:

". . . the one who is influenced is not explicitly told what to do but is nevertheless subject to the will of another." [7]

The manipulator is a master at forcing the student to make decisions on the basis of information the Manipulator has previously censored and arranged in such a fashion as to make only one choice possible. If the Boss-Counselor is a door-closer, the Manipulator is a deck-stacker. Never so crude as to directly tell Johnny Jones that he ought to be an engineer, the Manipulator sees to it that the boy is well supplied with recruitment literature and does not consider the limitations of that profession or those within himself. When challenged, the Manipulator has a ready answer: "I'm just being scientific. This is a science, and aren't the goals of science first description, then prediction, and ultimately control?" Since the Manipulator typically has some training to recommend him for his position—perhaps one or two graduate courses in psychology or guidance, or maybe attendance at a short NDEA summer guidance institute, he is a living example of the old adage that a little bit of knowledge in a dangerous thing.

Both the Boss-Counselor and the Manipulator are making deliberate and conscious efforts to control the behavior, choices, and value systems of those students who come within their influence; one is merely more indirect than the other. When challenged, both claim the interests of the clients are being cared for in the long run, a defense which smacks of rationalization. C. H. Patterson has this to say:

"There is relatively little respect for the individual, although there may be claims that influence or control is for the presumed good of the individual being influenced or controlled. Whether this claim is sincere or not is immaterial; it is the fact of external control or influence which is the essence of this approach. There may be attempts to understand the individual's feelings, needs, and attitudes; but this is done for the purpose of influencing or changing them." [8]

For all their faults, it must be said that most of our Procrustean-counselors are sincere individuals who are attempting to do what they think needs to be done in the only way they know how. But how did they get into counseling?

The faint "beeb-beeb" of Sputnik I made louder noises in behalf of educational practices in America than all the educators were able to do in a generation. A nationwide demand arose for better educational and vocational counseling, and concern for the welfare of the academically talented. The demand for trained counselors skyrocketed far above the supply, and we haven't caught up yet. As a result, a large number of untrained or partly-trained individuals have been swept into counseling positions. Moreover, as William James has observed it is generally an American characteristic to be impatient of results. It has long been a tradition in our republic to strive for quick results, to achieve them in the easiest and most direct way, with a maximum of efficiency and rapidity. This attitude seems to have permeated the educational philosophy of many counselors. Thirdly, in some cases we may have overstated our case. In our enthusiasm to get a guidance and counseling program started, we have in some areas promised too much too

soon to parents and boards of education. Procrustean methods are often resorted to in such a case in order to have some product to point to when the program undergoes evaluation.

Let there be a warning to the Procrustean-counselors among us and to everyone interested in the development of guidance and counseling in our schools. Not much remains of a young guidance program after an angry multitude sends in a Theseus with a broad-ax to exterminate the Procrustean. For a long time afterward, the typical reaction in a school district which has gone through such unpleasantness is, "We had guidance in our school once, and thank you just the same, but we don't want any more."

Preventing *pseudo-guidance* points of view from becoming established in a school is certainly easier than attempting to eradicate them after they have become established. The key seems to be the selection of competent personnel. But, as the Conant report on the junior high school cautions,

"It is by no means easy to find competent guidance personnel. Obviously, it is better to delay the expansion of the (guidance) staff than to employ unsatisfactory people." [9]

"Competent personnel" is not necessarily the willing-and-eager individual with a few guidance courses or a summer institute behind him. It is not necessarily the most experienced teacher on the staff, the coach, or the faculty member liked most by the student body. Obviously, it cannot be guaranteed by the presence of a Master's degree, because it is the counselor's point of view which may be more crucial to his success than the amount of subject matter he knows.

In this paper the Procrustean

Counselor's viewpoint has been identified: the converse is probably more difficult to describe and to communicate to the public but our challenge is clear. It is to relegate Procrustean-counselors to the same position as the original Procrustes—far back into the almost-forgotten past.

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Advice to Counselors in 1673

Give not your Advice or Opinions before asked; for that is to upbraid the others Ignorance: nor attribute ill success to the neglect of your Counsel; nor be angry if your Advice be not followed. Neither accustom your self to find fault with others Actions, except vitious; for you are not bound to weed other mens Gardens.

Be not too eager in counselling others; for the evil Success (which happens frequently to good Advice) will be laid to your charge, and seldom shall you be thanked for the good.

Obediah Walker,
Of Education, Especially of Young Gentlemen
From John Brewer,
The History of Vocational Guidance, Harpers
1942

The New Occupational Outlook Handbook

JAMES J. TREIRES

IN THE two years since the 1959 edition of the Occupational Outlook Handbook was prepared, the world of work has undergone a great many changes. A few of these have resulted from dramatic technological advances, such as the development and successful launching of manned vehicles into outer space. But most of them have resulted from the many minor and often unnoticed events that may seem insignificant in themselves, but which, accumulating and interacting over a period of time, bring about basic alterations in the currents of economic life.

The new 1961 edition of the Handbook, scheduled for publication this fall, recognizes both types of changes. A new statement on astronomers, for example, has been added to the Handbook because of the greatly increased interest in this field. Electronic computer operating personnel, one of the newest occupational groups, are also covered for the first time. Similarly, the chapter on the aircraft, missiles, and spacecraft field, which first appeared in the 1959 Handbook, has been extensively revised to keep pace with recent developments. On the other hand, the outlook in railroad occupations and agricultural occupations continues to show the cumulative effects of improved technology developed and applied over a period of many years. Both agriculture and the

railroads continue to play key roles in our nation's economy, but their positions relative to many other areas of work have declined greatly over the years.

Since the Handbook is designed primarily for use in long-range career planning and vocational guidance rather than in job-placement activities, it focuses on the long-term trends in employment in different occupations rather than on the current supply-demand situation. It would therefore seem reasonable to expect that the general employment outlook presented by each succeeding edition of the Handbook would agree, in large measure, with that shown by its predecessor. Dramatic reversals in outlook from one edition to another would indicate either that our economy is subject to chaotic short-term fluctuations or that our research is inadequate. It is, therefore, not surprising to find that the major conclusions about the outlook are pretty much the same in the 1961 Handbook as in the 1959 edition.

Outlook for the Sixties

Professional and technical personnel, skilled blue-collar workers, clerical and sales workers—in general, the fields requiring the most education and training—will grow most rapidly in the 1960's. Automation will affect many occupations, particularly the semiskilled workers in manufacturing industries, whose numbers will increase less rapidly than the work force as a whole. On the other hand, em-

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ployment of service workers, whose jobs are not often affected by automation, will grow at an above average rate.

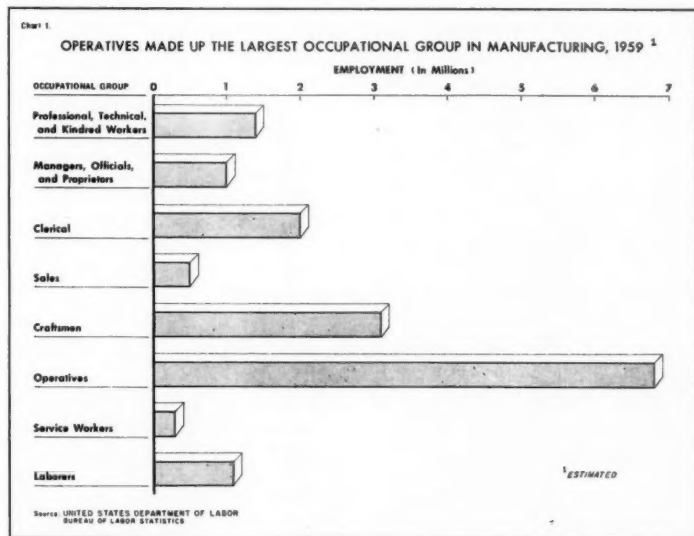
Difficult job adjustment problems will be faced by farm youth, especially those who wish to stay in farming. Not only is the outlook for farm employment unfavorable—an actual decline in the number of farmers and farm workers is expected over the decade—but also the rural areas have a higher proportion of young people than do urban areas. Helping rural youth who wish to enter jobs in the cities will be a big job for their local school counselors, who will be required to learn as much as they can about job opportunities in industry and commerce.

It should be noted here that there are a great many occupations related to agriculture which are *not* declining. Farm production is expected to increase considerably, and the need for trained persons will increase considerably, in firms manufacturing feeds, fertilizer, and other farm products, providing

business services to farmers, and conducting agricultural research. Graduates of agricultural colleges, many of whom enter professional and technical occupations, will continue to have good employment prospects. These are facts which are often obscured in general discussions of the decline in "farming."

Unskilled workers are also expected to be in a disadvantaged position in the years ahead. The Handbook findings do not offer much encouragement to boys and girls who drop out of school and who, as a result, usually cannot qualify for higher level work. Their opportunities will be limited, their pay will be low, and they will experience much more than their share of unemployment.

These general statements indicate only the broad outlines of the Handbook findings. As might be expected, the outlook in a particular occupation is different from the outlook for the major occupational group as a whole and is much more subject to change. For ex-



ample, within the professional and technical group, employment of engineers and college teachers is expected to expand rapidly, while employment of optometrists and geologists will grow at a much slower rate. Even within a single profession such as engineering, there are significant differences in outlook among the various specializations.

The new Handbook represents a significant expansion in occupational coverage. Among the occupations that will be covered for the first time in the 1961 Handbook, in addition to the astronomers and electronic computer operating personnel mentioned earlier, are appliance servicemen, business administration professions, dental laboratory technicians, geographers, photographers, post office occupations, factory occupations not requiring specialized training, and the performing arts.

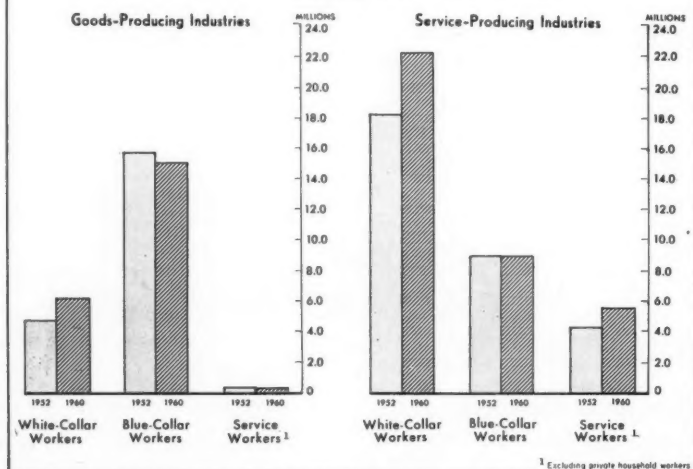
The sharp increase in the number of young people entering the labor force over the 1960's has been

Chart 2. CHANGES IN EMPLOYMENT IN WHITE-COLLAR OCCUPATIONS SINCE 1950



pointed out in the Department of Labor's chart book, "Manpower: Challenge of the 1960's". In addition, the National Defense Education Act of 1958, with its emphasis on counseling and guidance, has created a growing awareness of the

Chart 3. OCCUPATIONAL COMPOSITION OF EMPLOYMENT IN NONAGRICULTURAL GOODS-PRODUCING AND SERVICE-PRODUCING INDUSTRIES 1952 AND 1960



¹ Excluding private household workers

need for guidance services and has increased emphasis on comprehensive professional training for this work. These and other developments will make more critical than ever before the need for accurate and up-to-date occupational information. The new Handbook can play a key role in meeting this need.

Handbook statements will also be available shortly as separate pamphlets in the Occupational Outlook Report Series. The 1961 series will consist of 101 separate career pamphlets especially suitable for library use or for vertical files. The Bureau also plans to issue a new series of wall charts and Occupational Outlook Briefs presenting highlights from the new edition and distributed on request.¹ The Occupational Outlook Quarterly will continue to supplement the Handbook with reports on new employ-

ment developments, new outlook studies, and other research of interest in vocational guidance.

In its 16 years of occupational outlook work, the Bureau has received a great deal of valuable assistance from members of the guidance profession in planning and developing these publications. We hope the results of their suggestions and good counsel are evident in the new Handbook and related publications. Comments and suggestions for further improvements are always welcome.

¹ Readers wishing to be added to the occupational outlook mailing list or to receive announcements regarding the publication of the new Handbook and Occupational Outlook Report Series should write to the Occupational Outlook Service, Bureau of Labor Statistics, U. S. Department of Labor, Washington 25, D. C.

Employment of June 1960 High School Graduates

Four months after graduating from the Nation's high schools, almost half of the class of June, 1960, were enrolled in college and most of the others were in the labor force. Those who decided to go to work did not have any easier time finding jobs than did the 1959 graduates a year earlier. In a job market affected by some economic slowdown, about 85 per cent of the 1960 graduates who entered the labor force were working in October, 1960, and the other 15 per cent were actively looking for employment.

The boys and girls who quit school in 1960 before finishing high school managed to find jobs about as readily as the 1960 high school graduates. But the economic cost to them of not having a diploma and the training that comes with it was clear in other ways—in the lower skill of the jobs they could get compared with the graduates as well as the smaller proportion of jobs providing a full week's work.

THESE FINDINGS of the U. S. Department of Labor's Bureau of Labor Statistics are based on advance estimates of the second annual nationwide survey of the status of recent high school graduates. The study was made in October, 1960, as a supplement to the

monthly labor force survey conducted and tabulated by the Bureau of the Census.

Three-quarters of a million of the 1.7 million June high school graduates—nearly 1 out of every 2—were attending college at the opening of the fall semester. This

topped the number of college enrollees a year earlier from the June, 1959, class by 100,000; the increase resulted entirely from the larger size of the high school graduating class. Fifty-four per cent of the boy graduates went on to college, but only 38 per cent of the girls.

About 700,000 of the June graduates who did not go on to college were in the labor force in October—close to 90 per cent of the men and 75 per cent of the single women. Of the graduates who were not in the labor force or in college, one-fourth were girls who had married and almost half were attending special schools offering training for nurses, secretaries, or other occupations.

Some 350,000 young persons 16 to 24 years of age had dropped out of elementary or high school between January and mid-October, 1960. (This report does not include persons below age 16.) Only 75 per cent of the boys and 65 per cent of the single girls were in the labor force—smaller proportions than of the graduating class. Of those not in the work force a large portion, about half, were apparently neither attending special schools

nor occupied with housework at home.

The importance of completing high school before going to work was clearly shown in the comparison of the kinds of jobs which the graduates and the dropouts were able to get. Persons with high school diplomas were three times as likely to be hired for clerical or sales jobs as were dropouts (47 per cent compared with 16 per cent). On the other hand, only 17 per cent of graduates as against 33 per cent of the dropouts were working as laborers, domestic workers, waitresses, or in other service jobs which usually pay much lower wages than office work.

The school dropouts also had a harder time than those armed with diplomas when it came to finding full-time jobs. About 20 per cent of the dropouts but less than 10 per cent of the graduates who were at work in nonfarm industries indicated they could not find full-time jobs or had been reduced to part-time on their jobs because of slack work.

Additional data from this survey will be issued in a Special Labor Force Report reprinted from the May 1961 Monthly Labor Review.

Nearly every American changes his city several times during the course of his life. Nearly every American has changed occupations. All this gives a sort of poetry to the country and its inhabitants, something like an immense Western story. This mobility and this familiarity create a climate of youth. . . . It is a character—even when it astounds a European.

ANDRE MAUROIS

College Enrollments Reach an Alltime High

MORE THAN 3.6 million students in 1960 were enrolled in colleges and universities in programs normally creditable toward academic degrees, according to the 15th annual survey of opening (fall) enrollments made by the U. S. Office of Education.

Total fall enrollment in 1960—the 9th consecutive academic year in which fall enrollments have increased—set a new alltime high, which was almost 208,000, or 6.1 per cent, above the 1959 fall enrollment. This increase exceeded the 4.4 per cent rise between 1958 and 1959, when total fall enrollment rose by about 143,000 students.

About 930,000 of the students enrolled in college last fall were “first-time students”—those who were not previously enrolled in degree-credit programs. This represented a gain of 12.4 per cent over the fall of 1959. At the same time, the number of “continuing students” increased only 4.1 per cent, to 2.7 million in 1960.

These statistics include degree-credit students only, and do not include the large number of persons enrolled in non-degree-credit adult education programs or in college programs that are primarily occupational in emphasis.

Increases for Men, Women

Between 1959 and 1960, total fall enrollments rose 9 per cent for women (reaching 1.3 million in 1960) and 4.5 per cent for men (rising to 2.3 million). This was the fourth consecutive year that the rate of enrollment for women increased faster than the rate for men. Women accounted for about 53 per

cent of the increase in opening enrollments between 1959 and 1960. As a result, the proportion of women in the student population rose from 36.1 per cent in 1959 to 37.1 per cent in 1960. This proportion, however, was still below the 40.2 per cent recorded in 1939.

Types of Institutions

In the fall of 1960, as in 1959, about 43 per cent of all degree-credit students were enrolled in universities, and about 28 per cent attended liberal arts colleges. Another 13 per cent were enrolled in junior colleges, and 10 per cent attended teachers colleges. The remainder were distributed among independently organized professional schools (other than teachers colleges)—such as medical, law, technological, theological, and art schools.

The largest relative increase in total fall enrollment among the various types of institutions was 16.3 per cent for the group of “other” professional schools (schools of medicine, law, business, pharmacy, optometry, etc.). This group of schools, however, accounted for only about 1.5 per cent of total fall enrollment in all institutions combined. Enrollment of women in this group of schools increased especially rapidly, rising almost 46 per cent between 1959 and 1960.

Junior colleges also had a greater-than-average increase in total fall enrollment. Their figure was more than 10.2 per cent higher in the fall of 1960 than in 1959. Art schools showed the only decline (1.4 per cent).

Public, Private Institutions

The proportion of degree-credit students in publicly controlled institutions has been steadily increasing for a number of years. These schools had about 60 per cent of all enrollees in the fall of 1960. Between 1959 and 1960, total fall enrollments in public colleges and universities increased by 6.6 per cent; those in private institutions rose by 5.4 per cent. The gain in first-time fall enrollments in public institutions between 1959 and 1960 was even more noteworthy—the increase was 15.1 per cent, compared with 8.2 per cent in private colleges and universities.

Relation to Population

Degree-credit students enrolled in the fall of 1960 accounted for about 37 out of every 100 persons between the ages of 18 and 21 in the United States¹ and the District of Columbia. In the fall of

1939, degree-credit students accounted for only about 14 out of every 100 persons in the 18-21 age group. Similarly, students enrolled in college for the first time in the fall of 1960 represented about 36 per cent of the 18 year-olds in the country; the corresponding percentage for 1939 was 17 per cent.

Between July 1939 and July 1960, the college-age population rose by about 80,000, according to estimates of the U. S. Bureau of the Census. The great change in the proportion of young people enrolled in college can be attributed not only to the increase in the college-age population but also to the fact that more of the Nation's college-age youth can and do attend college. It also reflects the increasing demand for well-trained workers by business, industry, and government.

¹Excludes Hawaii and Alaska.

Counseling for Professional Careers in Agriculture

R. J. AGAN and H. R. BRADLEY

COMMUNICATION between colleges or universities and the high school graduating seniors needs continued emphasis in regard to selecting a lifetime career.

It is difficult for one counselor to equally represent all avenues of study which a young student should consider in his selection of a university department in which to major. At the present time few students inquire of university de-

partment heads about opportunities in various occupational fields. Partly because of this, some occupational fields become overcrowded while others suffer a shortage of entrants.

A five year study by Bradley (in its second year) indicates that a great deal of shifting in occupational choice occurred shortly after graduation from high school. Direct information from university departments might have minimized the changes.

Being concerned about the above mentioned conditions in relation to agricultural occupations, the staff in Agricultural Education at Kansas

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State University designed a pilot experiment to help those high school seniors with general tendencies toward agricultural careers. A friend of Agricultural Education in the state, working as agricultural representative for one of the banks in Kansas offered to assist by providing the facilities for a meeting between a selected group of high school senior boys, their vocational agricultural teachers, and the Kansas State University staff in Agricultural Education.

The date was set and invitations extended to each of the teachers of vocational agriculture of the area to bring two of their most promising senior boys who were interested in a career in the field of Agricultural Education to a dinner hosted by the bank sponsor. Attendance was 100 per cent of the invitations extended with twenty-one seniors and instructors present, three bank officials, and three staff members and one student in the Agricultural Education curriculum from the university.

Following the dinner the meeting adjourned to the bank board room. The four member team from the university then made a forty-minute presentation divided as follows:

10 minutes—need for professional workers in agriculture

10 minutes—the university curriculum for professional workers in agriculture

10 minutes—specialized training given for professional workers in agriculture

10 minutes—social life at a university

Prior to the forty minute program outlined above, the high school people were issued pencil and paper upon which to record specific questions relating to their individual interests to be directed toward one of the speakers. The

group was then divided into four buzz groups with the four men from Kansas State University rotating and meeting ten minutes with each of the groups to answer questions. The formal meeting was concluded with a ten minute summary statement by one of the university staff members.

Soft drinks were served through the courtesy of the bank and informal discussion continued for another thirty or forty minutes, participants being free to leave at their will. Many informal anecdotal statements were received by the university staff from the high school's seniors:

"I did not know that such opportunities exist in a professional field of agriculture."

"Agriculture is not a dying industry as far as opportunity is concerned, I thought it was."

"College professors are enjoyable people to be with after all. I didn't think they would be."

Objective evaluations of this experimental activity will have to come later. It will be interesting to note how many enroll in Agricultural Education at Kansas State University. Data will be kept on each student in attendance to determine his choice of university major department.

Within ten days following the meeting, one young man attending the pilot conference brought two additional students to the departmental office from the same school (173 miles each way) for further counsel.

It is anticipated that the side effects of the meeting, although not directly measurable, will be considerable with each student and teacher in attendance relaying their experience to their peers. It is the present plan of this staff to expand such meetings over the state to acquaint students with opportunities in the profession.

High School Guidance of Potential Engineers

CHARLES H. HEIMLER

WHAT INFORMATION should be given to high school students who express an interest in studying engineering in college?

The usual stock answer directs the student to the study of as much math and science as his high school offers, and suggests that he send for the catalog of the school of his choice so as to familiarize himself with the engineering college's requirements. Unfortunately, specific detailed information is not always provided by the student's counselors.

The typical student, even if he has had contact with working engineers, does not have a clear-cut idea of what engineers do. Nor is he familiar with the kind of education they receive. The student may be thinking in terms of a scientific, mathematical education or, at the opposite extreme, he may think of engineering in terms of a high level machine shop program. Unfortunately, many students do not recognize the fundamental distinctions between science, engineering, and technical work such as electronics or mechanics. Moreover, in many cases the student is totally unaware of the basic differences between the various branches or fields of engineering.

In the opinion of the author, the following information should be presented and made clear to all future engineering students.

1. There is a large and ever in-

creasing diversity in the types of work performed by people who are called engineers.

2. Although there are fundamental differences between science and engineering, there is an important relationship between basic science principles and present-day engineering advances.

3. There is a present trend in engineering education towards the inclusion of more math and science in undergraduate programs. Moreover, a completely new type of program, science engineering, has taken its place in the engineering curriculum.

4. Although the selective admission standards for engineering colleges are high, there is a large number of undergraduate student failures.

5. The publicly supported two-year college, usually called a junior or community college, provides an excellent academic setting in which to begin the college study of engineering.

The information and opinions presented here are based on the author's experience as a high school and college teacher engaged in the counseling of pre-engineering students, and as a participant in a National Science Foundation Institute which was devoted, in part, to the study of the major problems in engineering education.

Professional Engineering

Traditionally, engineering work has dealt with the application of knowledge. The engineer is interested in changing the physical

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world, in the design and testing of new highways, machines, power plants, space satellites, and other devices of practical use to man. In addition, engineering deals with the design and construction of the factories and machines which are necessary to the large scale production of these engineering creations.

As it is presently constituted, professional engineering is divided into four main divisions or fields of specialization. These divisions are the fields of mechanical, chemical, electrical, and civil engineering.

Mechanical engineering involves the design and development of tools, equipment and machinery such as engines, automobiles, printing presses, etc. Chemical engineering deals with the design of equipment and plants for the large-scale production of chemicals and chemical products.

Electrical engineering is divided into two main types of activities: power and electronics. The primary concern is generally electronics—communications and control systems—whereas the production and transmission of power also occupy an important segment of the field. Civil engineering, the oldest of all engineering fields, consists of the design and construction of highways, buildings, bridges, and tunnels.

In actual practice there is much overlapping between these engineering specializations and their many subdivisions. For example, mechanical and electrical engineers work very closely in the design and production of electrical machinery. Aeronautical engineering involves the application of mechanical engineering to the production of aircraft, and the relatively new field of nuclear engineering has developed as an outgrowth of chemical engineering. Heating and air conditioning engineers are trained as mechanical engineers, and the

sales, industrial, or executive engineer may come from any one of these specializations.

Engineering and Science

The engineer is concerned with the "how," with practical things, and getting the job done, while the scientist, on the other hand, is concerned with the "why," with the explanation and understanding of natural phenomena. The latter is not necessarily, if at all, interested in the practical considerations. The scientist works toward the discovery of new principles and concepts, while the engineer's interest is in the utilization of these principles and concepts for the production of practical things.

Essentially, science centers about the discovery of new knowledge, and engineering deals with the application of knowledge. The scientist wants to know and understand the universe while the engineer is involved in changing the physical world. Science is concerned with the investigation of the basic principles and truths of nature, and engineering is involved with their practical application, with putting these principles to work for the benefit of mankind.

Therefore, if a student has thought of an engineering career in terms of fundamental research and investigation, he may be in for a let-down. In general, engineers work within the limits of ten per cent error and may multiply the results of their calculations by a factor of ten in order to insure the safety of the device they are designing. Some students may consider these practices to be unrefined, somewhat crude, and worst of all, unscientific. The student may never completely understand and appreciate the idea of designing that is only ninety per cent perfect with the knowledge at

hand, rather than spending additional time trying to discover new information through fundamental, basic research.

The Engineering Curriculum

The conventional engineering curriculum is divided in the following way. One-fourth of the program consists of science and mathematics, one-fourth is devoted to the humanities and social studies, and about one-half of the work is in the practical engineering subjects.

Although engineering education has leaned towards the practical side in the past, contemporary critics of American collegiate engineering programs feel that considerable improvement can be made by providing for increased study in basic science and mathematics. These critics suggest that today's successful engineer must continue to be a practitioner knowledgeable in the applied arts, yet more than ever before, he needs a more fundamental grounding in the basic principles and concepts of science.

Thomas J. Hamilton, President of the State University of New York, declares, "One hundred years ago engineers invented things that scientists did not understand. The steam engine, far from being based on previously completely known scientific principles, raised questions which the scientists had to answer. Today the situation is reversed. Invention and innovation will be the product only of those who are firmly grounded in the sciences. Beyond the level of the gadget, the bright intuitionist with a mechanical bent will make few major contributions in the century ahead. We must depend for our engineering progress on extremely able men who are well educated liberally, scientifically, mathematically, and as engineering scientists."¹

This increasing relationship be-

tween technological developments and the theoretical concepts of science has stimulated a trend towards a reduction in the amount of college course work in the applied aspects of engineering, and on increase in emphasis on science and mathematics. Schools such as Hofstra College on Long Island, the San Fernando Valley State College in California, and the University of California, offer a general engineering curriculum, heavy in math and science, that is intended to prepare students for specialization in a fifth year of graduate study, or for general engineering work in industry upon graduation.

Cornell University in Ithaca, New York, has a five year bachelor's program in engineering. The purpose of the fifth year of study is to allow for broader and more intensive study in science, mathematics, and the humanities.

Some colleges, however, are still holding to a conventional engineering program that places emphasis on the practical and applied. For example, Bucknell University in Pennsylvania has an engineering program that is divided into the four divisions of electrical, mechanical, chemical, and civil engineering. The purpose and intent of each division is to prepare the student for work in a specialized engineering field. Yet even here there has been a reduction in the amount of practical work such as machine shop practice for mechanical engineers and an increase in attention to basic theoretical principles and concepts.

This need for increased emphasis on science and mathematics has been recognized by practicing engineers and engineering educators

¹ THOMAS A. HAMILTON and DURWARD B. VARNER, "The Meadow Brook Seminars on Higher Learning," *J. Engineering Education*, 49, No. 7 (Mar. 1959), 553-558.

alike. Merritt A. Williamson, Dean of the College of Engineering at Penn State University, stated in a speech at the McDonnell Aircraft Company in St. Louis, Missouri, on Oct. 30, 1959, "We are living in an era where just to be liberally educated, one must have a knowledge of science which is far deeper than what was taught twenty years ago in our liberal arts curriculum. Similarly, there is no denying the need for deeper study and more profound understanding of mathematics, physics and the underlying engineering sciences: fluid mechanics, thermodynamics, rate and transfer mechanisms, electrical theory, and the nature and property of materials."

The concern for the relationship between science and engineering has brought about the development of a new engineering program which has been given the name Science Engineering. Admittedly intended for top students, science engineering involves heavy study in the science fundamentals, and their theoretical applications. The prime objective of this type of undergraduate course is to prepare the student for a fifth year of advanced graduate work.

Science engineering may be best described as a field of applied science directly concerned with the study of practical engineering problems which are capable of solution by the techniques of research and investigation. Undoubtedly, this curriculum has developed as a direct result of the growing need for graduate engineers who are well trained in science, mathematics, and the techniques of research.

J. Stuart Johnson² estimates that in the future years five to ten per cent of all engineers will be con-

cerned with science engineering; creative design engineering will employ ten to twenty per cent of all engineers in the process of putting these new principles and concepts to practical use.

Johnson believes that the large bulk of the engineering profession (fifty per cent) will still be employed in conventional work dealing with the design and operation of buildings, machines, cars, airplanes, and similar engineering products. However, ten to twenty per cent will probably be employed as engineering technicians engaged in routine tasks such as testing, inspection and analysis. Five to ten per cent of all engineering graduates will do non-engineering work such as administration and sales.

The Drop-out Rate

An important consideration for the prospective engineering student is the existence of an excessively large number of failures in engineering schools. On the average, forty to fifty per cent of a freshman engineering class will withdraw and leave college before completing the work required for a degree.

In public engineering colleges the failures may be considerably higher than this figure. For example, the Dean of the School of Engineering at the Louisiana State University has stated that for every 800 engineering enrollees in the freshman class of his school only 150 graduated as certified engineers.³

Engineering educators give the following reasons to explain this high drop-out rate: (1) high standards of engineering colleges, (2) inability or a lack of desire to handle a heavy academic load of mathematics and science, (3) a

² J. STUART JOHNSON, "A Philosophy of Engineering Education," *J. Engineering Education*, 49, No. 7 (March, 1959), 580-587.

³ WILLIAM F. BRAZZIEL, JR. "Guidance Needs in Scientific and Technological Education," *Science Education*, 44, No. 3 (Apr., 1960), 202-207.

combination of low academic standards and poor teaching in high school which have resulted in sub-standard preparation in mathematics, (4) loss of motivation on the part of a number of students when they realize that engineering work is not something in which they are truly interested, (5) lack of financial resources, and (6) other personal factors such as marriage or entrance into military service.

The unfortunate, but prevalent, practice of allowing a high percentage of failures in engineering colleges should be recognized by those students who are heading toward engineering careers. To be successful in an engineering undergraduate program, the student must not only be good at mathematics and science, but he must also be highly motivated and interested. In addition he must be willing to spend considerable time in the classroom, in field work, and at study. The engineering student will find that, on the average, the total time he puts in on his education exceeds that of his classmates in many other fields. This often means that the student will not be able to participate in varsity sports and, in addition, must restrict his social activities if he aims at graduating with average or better grades.

Pre-Engineering Programs

Taking into account the high rate of undergraduate failure, the rigorous program that is mandatory, and the expensive cost of attendance at private engineering colleges, many educators are suggesting that the high school student who is unsure of his interest in engineering, who may lack sufficient funds, or who may not have done well in high school, will get a better and more satisfactory start if he does not enroll immediately in an engineering college upon high school graduation.

The public two-year colleges (junior or community colleges) offer an exceptionally good opportunity for students to try out the first year of an engineering program at low cost. These colleges, usually located fairly close to home, provide an academic atmosphere which allows for easy transfer to programs other than engineering if the student decides that he lacks the ability to succeed, or if he finds that he is not truly interested in engineering. It is significant that the rapid growth in size and number of these colleges continues to increase the availability of this opportunity for more and more students.

Further, two-year colleges usually are interested in their freshman classes and furnish often extensive guidance facilities. This type of atmosphere is an appropriate environment for the so-called "late-bloomers."

Moreover, many public junior colleges offer two-year programs in technical fields such as electronic, chemical, industrial, or construction technology, and provide the means for a smooth transfer into courses of this type for those students who eventually decide that engineering is not for them. These technical programs are particularly suited for technically-minded students who do not want to stay in college for four years, or who find they cannot handle the math and science required in a four-year collegiate engineering program.

In ever increasing numbers students are enrolling in public junior colleges. This is reflected in the fact that although freshman enrollments in engineering colleges have been falling off, the enrollment in two-year college pre-engineering programs is increasing. It is anticipated that this enrollment increase will eventually be felt in the four-year engineering colleges when

these students transfer for their upper division work.

Some Summary Views

Pre-engineering students may be aided in the choice of a career if they are provided with information concerning the basic differences between science and engineering, and if they are led to an understanding of the relationship of mathematics and science to future engineering progress.

The prospective engineering student must give some thought to the engineering specialization in which he is interested; he must also consider the level of work for which he is most qualified. A student who has exceptional talent in science or mathematics may qualify for science engineering, whereas another student may be best suited by interest and aptitude for work as an engineering technician.

In the process of selecting an engineering school the student should be encouraged to realize that there are differences among the various engineering specializations. The curricula of collegiate engineering institutions range from those that are highly theoretical in

scope and content to those that are directed toward a practical and applied approach.

Moreover, it will be worth their while for many prospective engineering students to seriously consider the academic, social, and economic advantages of their local public junior college.

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ON WORK

Kahlil Gibran

Work is love made visible.
And if you cannot work with love
but only with distaste, it is better
that you should leave your work
and sit at the gate of the temple
and take alms of those who work
with joy.

Placeability of Older Disabled Clients

HERBERT RUSALEM

VOCATIONAL REHABILITATION focuses upon the ultimate vocational placement of the disabled client. However, placement success is a complex variable governed by a variety of factors such as the level of economic activity, the type of community, the availability of adequate rehabilitation services, the skill and tenacity of placement workers, the climate of employer attitudes toward disabled workers, and the attributes of the client population for whom placement is sought. Although each of these factors can play a dominant role in determining the success of a placement program at any time, it has been recognized that some classifications of disability present unusually difficult placement problems. One of these groups is the older disabled worker.

In an effort to explore the rehabilitation potential of disabled persons 60 years of age and over, Federation Employment and Guidance Service,¹ in cooperation with the United States Office of Vocational rehabilitation and the New York State Division of Vocational Rehabilitation, initiated a demonstration and research project in November 1957 entitled, "Demonstration of Feasibility of Vocational Rehabilitation for Vocationally Handicapped Persons 60 Years of Age and Over." The structure of this project has been described elsewhere in the literature.²

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¹Federation Employment and Guidance Service (FECS) is a privately supported, non-sectarian vocational counseling and placement agency in New York City, affiliated with the Federation of Jewish Philanthropies.

In brief, individuals 60 years of age and over are referred to the project for vocational evaluation, training, and placement. After medical examinations and one or more intake interviews, supplemented by psychological testing when needed, most clients are given a three-week evaluation experience in the FECS Workshop. At the termination of the evaluation period, a case conference evolves a vocational plan which is then implemented with the client. A preponderance of clients enter personal adjustment training in the FECS Workshop where emphasis is placed upon enhancing readiness for employment.

Throughout the rehabilitation process, as well as subsequent to it, specially trained employment counselors concentrate upon finding vocational placements for clients who give evidence of readiness for entrance into industry. A follow-up service ascertains placement success and assists clients with problems which may develop in job adjustment and the location of new suitable jobs if the initial placement terminates.

This study will report on the placement experience of a client population of 406 older disabled individuals served in the FECS Project from April 1, 1958 to March 31, 1960.

The Client and Services

The client population in this study had the following characteristics. The median age was 64.0 years. Almost 85% were males.

²Program for the Older Disabled Worker," Herbert Rusalem, *Journal of Rehabilitation*, September-October, 1959.

About 99% were referred to the project by the New York State Division of Vocational Rehabilitation. Fewer than 3% were earning wages or salaries at the time of entrance into the project. Cardiovascular problems constituted the major disability in more than 50% of the cases. Other primary disabilities (in descending order of frequency) were: orthopedic conditions, sensory disabilities, and systemic problems. The mean age at onset of the major disability was 56.4 years. More than 60% of these clients had a second disability. Almost half had a third medically determined disability.

The median educational level was 7th grade. More than one-third had been unemployed for two years or more at time of admission to the project. One-third had held the last job six months or less. More than half of the group directly attributed the loss of the last job to reasons associated with illness.

During the two-year period under study, 3,319 interviews were conducted, half of which were placement and job counseling interviews. More than three-fourths of the group were evaluated in the FECS Workshop. The remainder did not require this service, and were directly referred to the project employment counselors.

One out of each six older disabled clients entering the FECS Workshop evaluation was found to be not feasible or not ready for other project services. About three in five moved from workshop evaluation to personal adjustment training. About one-third completed this training prior to the termination of the scheduled 13-week period primarily because they achieved readiness for placement and were placed before the termination of the training period. Most of the two-thirds who spent the scheduled 13 weeks in personal adjustment training

were found suitable for employment and were registered for placement.

In total, 323 of the 406 clients served in the two-year period received one or more FECS workshop services. The others received FECS services, but not in the workshop. These services included vocational evaluation, personal adjustment training, and, for a small number, short-term employment in the FECS Workshop.

The experience of FECS in placing older disabled workers through this project is reflected both in the statistical data and the observations of the FECS project staff.

The Statistical Data

In total, 224 older disabled clients achieved 411 placements. The sources of these placements were:

| | | |
|--------------------|-----|---------|
| FECS Counselors | 237 | (57.7%) |
| Self-placed | 134 | (32.7%) |
| Placed in the FECS | | |
| Workshop for | | |
| Short-term pro- | | |
| ductive Work | 40 | (9.7%) |

The occupational level was determinable for 384 of these placements. (In the other cases, data supplied by clients and employers were not adequate for the making of a determination.) The distribution is as follows:

| | | |
|---|-----|---------|
| Manual Low-skilled | 136 | (35.2%) |
| Clerical and Kindred | 135 | (35.0%) |
| Manual Semi-skilled | 41 | (10.5%) |
| Service | 40 | (10.4%) |
| Sales and Kindred | 18 | (4.6%) |
| Professional, Administrative and Managerial | 14 | (3.9%) |
| Total | 384 | (99.6%) |

Of the 224 clients placed, 79 (35.3%) achieved one placement subsequent to completing intensive vocational rehabilitation service. One hundred and forty-five clients (64.7%) achieved more than one

placement. In contrast to the placements made by FECS counselors, self-placements were characterized by a higher incidence and proportion for jobs in the professional, administrative, managerial, semi-skilled and service areas. Placements made by FECS counselors showed a heavier loading of clerical and manual low-skilled jobs. It should be noted that the data on occupational level of self-placements were derived from client self-reports. As a result, their validity is unverified.

The data on the duration of the placements achieved subsequent to service are limited by the fact that a proportion of the clients have been recently placed and many are still continuing to function on their jobs. Thus, the statistics reported below should be perceived as reflecting clients who, to some degree, are still in the process of holding their jobs.

Follow-up data were obtained on 136 older disabled clients who had obtained employment after receiving vocational rehabilitation service. Slightly less than 20% of this group held their jobs for less than one month. Almost half stayed on the job one to six months. The majority of these are still working on these jobs, in the process of adding additional time to their work histories. Almost 25% of the group have been on their jobs over 6 months, some of them as long as 20 months. About 9% hold jobs which provide irregular periods of employment.

The data concerning duration of employment are incomplete owing to the facts that data on duration of employment were not obtained in 39.1% of the "placed" cases. Many of these "placed" clients are continuing on their present jobs, extending the employment experience to an extent that is, as yet, undetermined.

Despite the fact that many of the placements achieved were part-time, in accordance with client capacities and desires, the median gross pay for those reporting a weekly wage was \$44.50. The median gross pay for those reporting an hourly rate was \$1 an hour. The age distribution as related to placement merits some review. Of all clients entering the project, placement was achieved by 54.2% of those in the 60-64 age group. Comparable percentages for the other age groups were:

| | |
|-------------|-------|
| 65-69 | 58.1% |
| 70-74 | 50.9% |
| 75 and over | 60.0% |

Of all the clients entering the project, 93% of those with systemic disorders as the primary disability were placed. The comparable statistics for the other disabilities were:

| | |
|--------------|-------|
| Emotional | 82.1% |
| Neurological | 80.0% |
| Sensory | 72.2% |
| Cardiac | 52.6% |
| Orthopedic | 42.0% |
| Chest | 31.2% |

Clients were rated on placeability at three points in the rehabilitation process. Clients who rated high on placeability during the intake process achieved placement in 69.6% of the cases. Those rated low achieved placement in 45.4% of the cases. This difference is significant at the 1% level of confidence. Clients who rated high on placeability at the end of the workshop evaluation period found placement in 76.0% of the cases.

Those who rated low achieved placement in 49.3% of the cases. This difference is significant at the 1% level of confidence. Clients who rated high on placeability subsequent to personal adjustment training achieved placement in 84.0% of the cases. Those who rated low were placed by FECS or

themselves in 34.8% of the cases. This difference is significant at the 1% level of confidence.

Some Observations

Counselor impressions, confirmed by available statistics, tend to support the following conclusions about the placement of the older disabled vocational rehabilitation client:

- A specially organized placement service for the older disabled worker functioning in conjunction with a total vocational rehabilitation program for this group, can assist clients to achieve some level of placement in many cases.

- A proportion of these placements will be short-term owing to the nature of the job, the seasonality of the work, the limited nature of jobs available to this group, and the physical and emotional readiness of the client. Despite evidences of negative placeability factors in some cases intensive placement efforts were made. In such cases, placement success tended to be less than with groups which are rated high on placeability.

- The major reason for short-term employment, other than the nature of the job obtained, is the inability of the client to maintain himself physically or emotionally in the work situation. Even in such cases, the short work experi-

ence may have value in confirming or correcting the client's self-concept as a potential worker.

- At least half of the older disabled workers who achieve placement subsequent to vocational rehabilitation service tend to obtain stable employment and to maintain themselves in their jobs. Initial employer response to this group is favorable.

- After the age of 60, selective factors begin to reduce the number of individuals in each progressively older age group available for placement. However, in this study, it was found that those who remain available for employment in upper end of the age scale (70 and over) tend to have comparable employment opportunities to those in the younger age range (60-69).

Based upon the experience of this project, a program for the rehabilitation of the older disabled individual seems economically and socially feasible. During the two-year period, conditions of low, moderate, and high employment prevailed. Yet, older disabled workers tended to be placed under all these conditions. It should be noted, however, that more than two-thirds of the placements reported for this group originated in the FECS program. This finding suggests the value of a specialized rehabilitation and placement service for older disabled workers.

There is a wicked inclination in most people to suppose an old man decayed in his intellects. If a young or middle aged man when leaving the company does not recollect where he laid his hat, it is nothing; but if the same inattention is discovered in an old man, people will shrug up their shoulders and say, "His memory is going."

SAMUEL JOHNSON

Utilizing the Talents of Retired Workers

NORMAN POPPEL

Time hangs heavy on the hands of the individual with nothing to do. For many of our retired workers this is all too true for they have nothing else but time. To some extent the situation has been alleviated through the medium of recreational activities and Golden Age clubs.

It is unrealistic to assume that these activities are sufficient for the individual who has spent the greater part of his life in the labor force. Recreation for the sake of recreation and as a replacement for life-long activity soon loses its meaning. The individual must have some meaningful activity, in addition to the activities of a recreational nature. For the retired working person the most meaningful activity usually is that which is vocational in nature and which gives him the feeling of usefulness in the community.

It is not necessary that the activities in which the person engages be remunerative. There are other rewards to be gained from participating in meaningful and useful tasks. We should like to suggest several such activities which can be organized for retired workers in the community. Several of the suggested activities have been successful in actual practice, and will be discussed in terms of case histories.

Friendly Visiting

Mr. M. retired after almost 40 years as a successful businessman. He turned his business over to his

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sons and took his yearly trip to a winter resort. Upon his return he joined a local Golden Age group but soon found he had many unoccupied hours on his hands. He became bored, irritable, and in every sense, a "cantankerous old codger." Still in his early sixties he decided to come out of retirement and return to his business, only to find there was no position for him.

He began making the rounds of friends, public employment agencies, and private community agencies looking for a job. After several months of discouragement and frustration he applied to a community agency for vocational counseling.

It was the counselor's impression that Mr. M. would best fit into a situation where he could feel he was helping others. Since money was not the problem it was suggested to him that perhaps he might be interested in visiting persons his own age who were confined to their homes or institutions by chronic illness. He was referred to a family assistance agency with a program of visitations to older, chronically ill patients. He received some training under the auspices of this agency and soon was an active participant in the program.

A program of friendly visiting with older persons as volunteers can be established under the auspices of the community Family Service Bureau or the Council of Social Agencies. The older person may be considered as being better equipped to visit older disabled persons by virtue of his age and communality of interests with other

older persons than most persons currently engaged in such work.

Youth Work

It has been this writer's experience that many agencies devoted to group work with teenagers are usually in need of persons to lead special interest groups. This is particularly true where the group is interested in such things as carpentry, cabinet making, model making, and metal work. Quite often, because of the lack of a person to teach the skills and supervise the work, these needs go unanswered or the group is disbanded.

Many persons within the retired worker group were formerly skilled craftsmen and would welcome the opportunity to impart their knowledge to the youth of their community. Since many of these group leaders are paid nominal fees for their services, a dual need would be served. A leader for the group would be provided and the leader would be able to supplement, to some degree, his Social Security or pension benefits.

Another area in which retired persons can provide services for young people is as speakers for Career Conferences. Perhaps the best authority on any given occupation is the individual who has spent the greater part of his life within the occupation.

The retired worker can be utilized in at least two ways in the process of imparting occupational information to teenagers. Firstly, in an organized program in conjunction with the high school as part of the school's guidance program.

Secondly, by making himself available to meet, on an individual basis or with small groups, with youngsters having particular interest in his particular field of endeavor. A community Vocational

Service Agency could establish a Vocational Resources Directory to handle requests and make referrals to the proper individual.

Older Craftsmen

Many older persons have spent years at hobbies in home workshops. A good portion of their work is of high quality and is salable through a retail outlet. If provided with such an outlet the individual could supplement his pension benefits from the profits derived from the sale of his products.

The most important ingredient in the success of such a project is the retail outlet. This could be arranged for in several ways. First, a local bank, business men's association, Chamber of Commerce, or service club could be involved to underwrite the rental of a small store. If this is unavailable a local department store could be requested to provide counter space for the display and the sale of the products. Once the project has been established the rental of an outlet could be provided for from a percentage of the profits.

Thirdly, the initial impetus and monetary support could be provided by the Council of Social Agencies or the Committee on Aging if one exists within the community. The sales force to staff the outlet could consist of the home manufacturers themselves. At a later date, if warranted by volume of sales, a retired sales person could be hired to operate the outlet.

Other Self-Employment

The opportunities for self-employment of retired women are usually restricted to babysitting jobs for friends and relatives. On an organized basis, through a babysitting service, many women can add needed funds to their monthly allotments. On the same basis, a homemaker service for working

mothers or mothers who are temporarily out of the home can be established. Professional supervision for both projects can be provided by the Family Service Bureau or the Council of Social Agencies.

Another source of remunerative self-employment for retired women is the establishment of a telephone answering and secretarial and typing service. Recently, two retired governmental employees established such a service. They solicited several small business men and office firms and within a short time had a full-time business on their hands. Within several months, additional retired women had been added to the staff. The number of hours worked were geared to the amount they were permitted to earn under the law. To handle late evening and night hours younger women were hired.

Employment in Community Agencies

A large majority of retired women have previously held positions of a clerical nature. Stenographers, typists, receptionists, switchboard operators, business machine operators, bookkeepers, file clerks, etc. At various times during the year, particularly during fund drives, additional clerical help is required by community agencies to handle the increased volume of work. A vast reservoir of clerical help is available from among our older retired female workers.

Two cases of retired women who had previously worked in clerical jobs and returned to the labor market stand out in the writer's mind. In the first case the person was the author's part-time secretary for a period of 9 months. She was still employed in that job when the author left to assume another position. The number of hours worked and her salary were worked out in such a manner that she would be able to earn the maximum amount

allowed under the law and still have many free hours for herself.

The second case in mind is that of a woman who was hired on a part-time basis to manage the affairs of women's service organizations. This organization maintained an office which was open several hours each afternoon. Again, in this situation, salary and hours were geared to the individual's maximum allowed income. This arrangement has been in existence for several years and has proved to be mutually satisfying.

Role of the Counselor

We are currently in a situation wherein the country has a high rate of employment as well as a high rate of unemployment. The older worker, and more particularly the retired worker, is in competition with the younger unemployed for whatever job openings exist. In addition, the older and retired worker is faced with the problem of labor market restrictions and prejudicial employer practices.

The counselor is then placed in a position where he must develop new opportunities for the client that are in a sense, para-labor market. In order to do so he must have available a comprehensive picture of the labor market and the community at large. He must also have as complete a picture of the client as possible, and must keep in mind the personality and physical condition of the client.

The counselor must be possessed of a fairly high degree of ingenuity and patience in order to work successfully with the older, retired worker he must be able to accept disappointment and frustration and be willing to keep trying in the face of frequent failures. Lastly, he must have wide contacts within the community and must participate in an active community education program in order to develop job opportunities for his clients.

Occupations Course Evaluated Eight Years Later

William A. Rubinfeld and Robert Hoppock

THIS ARTICLE is a report of student reactions to a course in Occupations offered in the ninth grade of the public schools of Newark, New Jersey. It includes students' judgements on the value of the course, their opinions on whether it should be required or elective, their views on future determination and possible alternate grade placement of the course, and their suggestions for improving the course.

The responses were obtained through a follow-up study, the purpose of which was to appraise the total guidance service. The instrument was a four-page printed questionnaire, and the population for this study consisted of every student who entered the ninth grade in September, 1951, and who remained in school a minimum of one year.

An entire section of the questionnaire was devoted to the Occupations course, which was a required subject, meeting five days a week for one semester during the ninth year. Returns were received from 65% of the graduates who could be reached and from 27% of the drop-outs who received the questionnaire. For all respondents the reactions were submitted from 7 $\frac{1}{2}$ to 8 $\frac{1}{2}$ years after taking the course.

Results

The results may be summarized as follows:

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1. Retention of the course was strongly supported, with only 6% of both graduates and drop-outs recommending that it be dropped.

2. Overwhelmingly, the students said that the course should be retained as a *required subject*, more than 80% of both graduates and drop-outs being of this opinion. This conclusion was particularly interesting, since the ratings of the course were not very favorable, with many students checking either the *Somewhat Worthwhile* or *Not Worthwhile* columns.

3. Feelings were divided about the grade placement of the course. About one-half of the graduates thought it should be placed in the eleventh or twelfth grades, while most of the drop-outs wanted it retained in the ninth grade.

4. Both graduates and drop-outs voted significantly for greater emphasis on occupations as well as on personal-social relationships.

5. A need to make the course more meaningful by making it a living experience was strongly indicated.

6. The necessity for having the course taught by properly qualified, competent, and interested teachers was strongly noted.

Suggestions Offered

The respondents offered many ideas for changes in the course. Their principal suggestions, followed by some direct quotations, were:

► Arrange for visits to schools and places of employment for life-like experiences in fields of interest.

I suggest that if a girl would like to be a nurse, she should get acquainted with it while she is in school. She should go to the hospitals some hours and work with the patients.

If this course were to include writing to different companies asking about all types of jobs that company offers or creates, students would get a better idea of what to plan for or choose—also field trips.

- ▶ Make the course better by inviting speakers with intimate knowledge of occupations and schools to visit classes frequently.

Have more people talk to students about what is expected of them in different fields. Discuss necessary qualifications with students and do not glorify the business world.

- ▶ Have the course given by interested and qualified teachers.

When dealing with people on the level of helping them to find themselves, we must have trained personnel who know how to interpret tests, motivations, etc. We must put more emphasis on this course. It is considered a farce by a majority of students. More intimate contact between student and perhaps guidance counselor, who should teach course.

Have well-trained teachers.

- ▶ Consider special grouping and different placement for the course.

Perhaps putting males and females in separate occupation classes would afford a greater opportunity to examine more occupations—more concentrated, too.

- ▶ Devise more realistic approaches to the problem of selecting an occupation as well as securing a position.

Students should be given some background as to how to seek employment and present themselves to their prospective employers.

Have students feel as though they

were going into many different jobs.

- ▶ Arrange for more intensive investigation and research in fields of interest.

More research on different types of occupations and what the job contains as far as qualifications and education.

- ▶ Assist students by means of timely information about occupational and job opportunities.

Suggest occupations which are wide open for the best future. The course I have chosen was never mentioned in school, and I had never heard of it until Hospital Corps School in the Navy. In this field there is a lot of opportunity for the future.

Why a Required Course

The reason for making the course required, with direct quotations, follow:

- ▶ The subject may assist the undecided in arriving at a decision.

Most boys and girls are not sure about the careers they wish to pursue and they definitely need information and guidance.

If in some way it helps one of more students "find" themselves, it is worthwhile.

As an "acquaintor" for those many students who are entirely oblivious of their future.

- ▶ Immature students are in need of definite help in the selection of an occupation. They are not wise enough in their freshman year to recognize the importance of this course.

The course is as important as the English and math courses. A student cannot realize the value of the course; therefore the school has the responsibility of seeing that it is required.

While in school, students look for an easy way out. If a subject is

not required, they will not take it even if it will be of help.

If it were an elective, very few students would choose it. Most students feel that once they have decided on their vocation, that's all they want to know.

- ▶ It helps supply students with a picture of many different occupations.

I believe the course should be required if only to make the student realize the many different occupations available.

Students should be given a close look at all occupations in which they may be interested.

- ▶ It is needed to understand the world of work.

Young boys and girls *must* be shown what lies ahead in life.

Very important, because I learned an awful lot about my future position. I had to interview three fashion artists, and although frightened, I learned what it really was like to work at being an artist and not just doing it for fun.

- ▶ It helps with selection of courses for the remainder of the high school years.

Gives student a chance to make changes before it is too late. To inform those who know little about the less popular occupations.

Pupils in the ninth grade take a certain course but want to get into some job that the course they have had has nothing to do with. Right in the ninth grade, by having this Occupations course, they can profit and change their course before they pass on and it is too late.

- ▶ It may lead to a greater appreciation of the benefits of an education.

Important to graduating student for future educational decisions.

Why an Elective Course

Those who argued in favor of making the course elective volunteered the following arguments:

- ▶ Students who have made their vocational choice would find the course a waste of time.

Some students are already decided about their occupations, and in such cases the course is practically worthless.

Many pupils know what they want to be and if they don't, they can elect this course for a general idea.

- ▶ Class attitude and learning would be improved if only interested students are participants.

Because the pupils who selected it would really be interested in it. If it was required, some pupils would not be interested and would cut up in class.

Classes should not be crowded with those who have no use or interest in the course.

- ▶ The ineffectiveness of the course offers enough reason not to make it compulsory.

I feel that the course is very superficial. I found the course too easy.

- ▶ Compelling students to take a course does not provide incentive for learning.

A required subject is usually distasteful. It can be filled by making it interesting.

- ▶ There is a lack of real interest on the part of some students.

If the student is interested in his future, he will surely want to take this course.

Recommendations

On the basis of the statistical data, students' comments, and inferences based on both, the following recommendations for the Occupations course were made:

1. Retain the course on the ninth grade level, but be prepared to reconsider the grade placement. In an industrial city like Newark, where the drop-out rate is higher

than in many other communities, there should be little question about the grade placement.

2. While the course is given to all students in the ninth grade, some thought should be given to an additional elective occupations or vocational self-appraisal course during the second half of the eleventh year.

3. To help students secure maximum benefits from the ninth grade occupations or the eleventh grade elective course, the requirement should be made that all teachers of these courses be certified as guidance counselors and be interested in teaching these courses.

4. Efforts should be made to have all students taking the required ninth grade and elective

eleventh grade course evaluate their experiences. This could be done shortly before completion of the course, prior to graduation from high school, or as part of any planned follow-up study program. The latter two would appear to be more appropriate times.

5. In reorganizing the basic ninth year course in occupations and planning an elective course, every effort should be made to enliven them and make them more stimulating by providing field trips to industry, business, and schools; by having guest speakers to discuss their occupations informally with individual classes or groups; and by arranging for a day or two on the job in vocations of interest to individual students.

The September, 1961 issue of the Journal, *Pastoral Psychology*, is devoted entirely to problems of vocational counseling. This well-known Journal entitles the issue, "The Church, the Minister, and Vocational Counseling." The specific reference for this issue is Volume 12, #116.

The October, 1961 issue of *Harper's Magazine* contains a special supplement entitled, "The College Scene." This provocative and interesting series of articles makes interesting reading not only for counselors, but may well be recommended to the high school and college student and parents, too.

The November, 1961 issue of the *Annals* of the American Academy of Political and Social Science is devoted entirely to the Teenage Culture. Again, important and thoughtful articles by leading authorities make this issue a likely long-term reference as well as immediately stimulating reading.

Post-High School Plans of Senior Girls in Relation to Scholastic Aptitude

ROBERT MILLIKEN

While high school girls have vocational plans which are quite diverse, many girls think and plan for marriage rather than a career. In fact, a recent study by Leopold showed that the primary interests of young women were in marriage and family, and only secondarily in an appropriate field of study or employment [3].

A steady increase of women in the labor market has occurred since the 1920's, with several factors responsible for the increase including a larger urbanized population, increased need for clerical workers, sales personnel, teaching, and other professional people, and greater numbers of labor saving household devices. Women work because of economic necessity, their better education, their better health, less need to be in the home, and because they are living longer [9]. The trend is for an increasing number of women to enter the labor market, particularly among women in their early twenties and between the ages of 35-64 [6].

There are objectors to these developments, such as those who deplore the competition with men, the lower pay for comparable jobs, and "negative effects" on child-rearing. Nevertheless, it has been noted that "the number of women studying medicine or engineering or business



General Foods Kitchens

is increasing in American higher education, and shifts in culture patterns are removing many of the social barriers against women in the scientific and professional fields" [4].

The 1957 *Occupational Outlook Handbook* indicated that women, in general, have more limited opportunities for job choice and advancement. It was found in 1955 that men made considerably more money than women in comparable positions. It was further noted that many young women leave the labor force due to marriage and family obligations, with a large number of them returning as their children get older [6].

Many young women bear ambivalent feelings toward the household and the field of work. While large numbers enter the clerical and

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kindred jobs which require relatively little or no formal training or education beyond high school, a large number of high school girls hope to attend college. Of those not planning higher educational training, a majority state preferences to attend business schools or to do office work. Hopwood, in a study of 203 freshmen women, found the two most frequent answers to what they wanted to get from a college education were (1) a well-rounded education, and (2) to prepare for both a marriage and a job [2].

Are we losing too many able women to the non-professional labor force? How many girls are unrealistic about occupational or educational goals? The following study will not answer these questions unequivocally, but should provide data to the crucial question of unused talent of American women.

Procedure

South Dakota seniors participate in a Statewide Testing program which has included the ACE Psychological Examination to identify potential college talent. In the present study girls from the 1955 and 1956 graduating classes were



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selected to determine what post-graduate plans they had and if their plans were related to their scholastic aptitude. The survey included 5,349 senior high school females whose occupational plans were elicited.

Twenty-eight groups of college majors or occupations were determined from the expressed plans of these women. The total raw score means were converted to AGCT standard scores and standard deviations. The number of young women within each group ranged from 4 in Policewoman to 1,620 in Clerical.



TABLE I
Converted AGCT Scores for Graduating High Senior Girls in South Dakota
by Occupation or Proposed College Major

| | <i>Mean</i> | <i>Sigma</i> | <i>Number</i> |
|--------------------------|-------------|--------------|---------------|
| Scientist | 144.5 | 19.5 | 14 |
| Pharmacy | 130.3 | 18.0 | 24 |
| Engineer | 129.9 | 18.3 | 7 |
| Lawyer | 128.4 | 14.4 | 5 |
| Behavioral Science | 125.5 | 18.5 | 11 |
| Actor | 123.4 | 18.8 | 13 |
| Medicine | 118.5 | 17.8 | 46 |
| Journalism | 116.7 | 19.5 | 27 |
| Religious Activities | 114.8 | 20.9 | 36 |
| Veterinarian | 110.5 | 22.3 | 5 |
| Home Economics | 109.7 | 21.4 | 79 |
| Music | 107.8 | 12.1 | 80 |
| Art | 106.6 | 20.0 | 110 |
| Business | 103.2 | 20.1 | 98 |
| Teacher | 103.2 | 19.8 | 1400 |
| Librarian | 102.9 | 21.7 | 5 |
| Social Welfare | 102.8 | 21.1 | 62 |
| Nursing | 100.5 | 20.7 | 1074 |
| Policewomen | 98.4 | 12.9 | 4 |
| Clerical | 97.4 | 18.5 | 1620 |
| Housewife | 92.8 | 19.3 | 160 |
| Military | 90.3 | 18.5 | 37 |
| Air Hostess | 89.0 | 16.0 | 107 |
| Beautician | 87.8 | 17.8 | 161 |
| Other Skilled Activities | 84.7 | 14.8 | 23 |
| Telephone Operator | 84.3 | 16.1 | 104 |
| Farming | 70.4 | 13.9 | 13 |
| Practical Nurse | 68.0 | 14.6 | 24 |
| Total | 100.0 | 20.0 | 5349 |

The AGCT scores for each preference group were also compared in terms of the college-bound and working or married categories.

Results

Students interested in the professional activities, all requiring higher educational training, showed the highest mean AGCT scores (Table I). Highest was the scientist category, followed by pharmacy, engineer, lawyer, behavioral science, and actor. The means were all more than one standard deviation above the total AGCT mean. Four other categories, medicine, journalism, religious activities and veterinarian were over one-half standard deviation above the total mean. It

was further noted that the means for each category requiring college training were higher than the total mean for the 5,349 female high school seniors.

Skilled and unskilled positions all ranked below the total AGCT mean. Two categories, farming and practical nursing, were approximately one and one-half standard deviation below the total mean. Those young women either already married or planning marriage, averaged almost one-half standard deviation below the total mean.

Discussion

These results are somewhat similar to those of Skodak and Crissy [7] who related I.Q. categories to



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interest scores of senior high school girls. They reported "interest in nursing, medical sciences, teaching, and social work is primarily found among superior or average girls. Interest in personal service, sales, and skilled trades is more frequently found among the average and below the average girls." The five interest groups showing the largest numbers were housewife, stenographer, office worker, nurse, and teaching [7].

In the present study, clerical (combining both stenographer and office worker) was the most popular, followed by teaching, nursing, beautician, and housewife. It is felt, as other studies have shown, that most young women could have realistically listed "marriage" along with their listed interest area.

Assuming realism of choice is related to ability, several factors appear. One, those young women selecting scientific professional activities are apparently "realistic" since a college education in the sciences requires high level ability in order to succeed. Second, the girls choosing lower-skill occupations generally do not require high level academic ability for success on the job. Third, the professions of teaching, nursing, home economics, and social welfare attract many young women whose abilities range from marginal to outstanding.

Since these are basically "women's" occupations and a means to achieve some measure of success and service to others, the heterogeneous attraction is not surprising [8].

Men, as Mead has indicated, must share in the management of the household and children if women are to enter professions. Also, women must accept the possibility of sacrificing years of child-rearing. They must determine if they can "compete" with men and if they can at the same time contribute to the world [5]. The problems of the welfare of children and cohesion of family life are certainly important and must be worked out by the families involved. It is felt that women can indeed work, if they realistically appraise themselves and their situation, and still have a happy family life.

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The Detroit Job Upgrading Program

Bernice M. Schreader

MANY employed youth who have left school only to be unsuccessful in finding or holding a job have turned to the Job Upgrading Program for help. This program is the result of the combined efforts of the Detroit Board of Education and the Detroit Council for Youth Service. The latter is composed of representatives of public and private agencies in metropolitan Detroit that have an interest in young people.

The aim of the Job Upgrading Program is to help unemployed young people, 16 to 21 years of age, who have left school before graduation to obtain work by helping them to become more employable.

Agencies working with young people refer to the program those individuals who desire this type of service and who give promise of receiving benefit from it. Membership in the group is on an entirely voluntary basis. Approximately thirty young people are enrolled in each of the seven Job Upgrading units at any one time. These groups meet with their teacher coordinator for three hours each morning Monday through Friday.

There is a flexible schedule and an informal atmosphere. Individual conferences, group discussions, filling out application blanks, practice interviews, field trips, educational movies, and parties make up the training. In all activities getting along with others, good manners, good grooming practices, promptness, and care in the completion of each assigned task are

stressed as a necessity to becoming a successful worker.

Regular classes in the high school where the groups meet are open to those young people who desire to have training in a particular skill. A few of these drop-outs have found the class work so interesting that they have returned to regular school, although for the majority of this group a job is the goal.

For the young people who need more intensive training than that given in the morning sessions there is a six-week subsidized work experience in the afternoons. This on-the-job training is available in a number of Detroit's Social Agencies, in some departments of the City of Detroit, and in several places of private employment. The funds to provide this supervised work experience are given to the Detroit Council for Youth Service by a private foundation, the City of Detroit and the Rotary Club of Detroit. The State Vocational Rehabilitation Service subsidizes several training jobs for young people with low I.Q.'s or physical disabilities. The staff members of the program work closely with the supervisors of the young people on these training jobs and make frequent calls at the place of employment.

After completion of the subsidized work experience every effort is made to help these young people obtain full time jobs. An important phase of the program is the follow-up service for the first six months they are in private employment. By these methods, the Job Upgrading Program has helped many youth to develop their potential.

BERNICE M. SCHREADER is Counselor, Job Upgrading Program, Detroit Public Schools.

The

Job Upgrading

Program

HELPS YOU BECOME
A SUCCESSFUL WORKER



SPONSORED BY
Detroit Council for Youth Service
Detroit Public Schools
Department of Guidance and Placement

Cover

That Is the Job Upgrading Program?

It is a free service for unemployed, out of school youth 16 to 21 years of age.

JOB UPGRADING HELPS YOU:

1. To get ready for a job
2. To find a job
3. To be a successful worker

TRAINING includes:

1. Learning how to apply for a job
2. Classes in regular school for job preparation, if desired
3. Proper grooming for the job
4. Help with your problems

PAID WORK EXPERIENCE lets you:

1. Earn while you learn
2. Obtain job reference for the future

A FULL TIME JOB

is your final goal and you will be assisted in every way possible to attain your objective.

FOLLOW-UP SERVICE

provides you with help while getting started on the job.

Page 2

Where Can You Get This Service?

Go to the Job Upgrading Center nearest your home, any morning between 8:30 and 11:30 A.M.

JOB UPGRADING CENTERS

CHADSEY HIGH SCHOOL
5335 Martin at McGraw
TYler 6-8221

PAUL HUNT Room 168

CODY HIGH SCHOOL
18445 Cathedral at Greenview
Vermont 6-6584

ROBERT THEILER Room 109

DENBY HIGH SCHOOL
12800 Kelly Road
LAkeview 1-1410

WILLIAM GREENE Room 124

NORTHEASTERN HIGH SCHOOL
4830 Grandy at E. Warren
WAlnut 1-8891

JOHN CHESMAN Room 221 BERNARD KOLOJESKI Room 223

Page 3

PERSHING HIGH SCHOOL
18875 Ryan at E. Seven Mile
Twinbrook 2-2665

VIVIAN DIMARCO Room 115

SOUTHWESTERN HIGH SCHOOL
6921 West Fort
Vinewood 3-7870

ZOLTEN AMBRUS Room 250 BERNICE SCHREADER Room 250

Referred by _____

Address _____

Phone _____

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The actual size of the folder is $3\frac{3}{4} \times 5\frac{1}{2}$ inches.

PRACTICAL AIDS AND USEFUL METHODS

Helping Students Use Occupational Information Files

FLORENCE E. PURCELL,
*Chairman, Pupil Personnel Services
New Hyde Park, N. Y., Memorial
High School*

Can your students locate occupational information with ease? Until recently, we found our students befuddled with the same kinds of problems which may confront yours. Now, however, we have devised a plan which we feel enables our students to locate occupational information with ease.

Until recently, we filed our occupational materials in standard letter-sized folders, housed in a standard four-drawer filing cabinet. Under this system, pamphlets were frequently misfiled, folders were continually flopping over, and not infre-

quently, entire folders were found out of sequence. Dismayed by these continuing frustrations, we decided to seek a simpler way of housing our occupational data.

We started our search by surveying neighboring schools to determine what success they had had in overcoming their difficulties. Most of our neighbors, we discovered, used the same system we did, and had experienced many of the same headaches. One school, however, had constructed a set of wooden cabinets containing individual drawers, which housed the various occupational units in alphabetical order. This unit was much too costly for us, and we did not wish to abandon the D.O.T. classifications in favor of an alphabetical arrangement of occupations.

After searching office equipment company catalogs we found that Cole produced a cabinet 30 $\frac{1}{2}$ " x 37 $\frac{1}{2}$ " x 12 $\frac{1}{2}$ " in size, containing 33 individ-



ual drawers. Each drawer was listed as 8 $\frac{3}{8}$ " wide, and 2 $\frac{3}{4}$ " high, and 12" deep, and would easily accommodate the usual occupational pamphlets. Three of these units, containing a total of 99 drawers, could be purchased for under \$200, a sum we could afford under our NDEA, Title V-A funds. This seemed to meet our needs. Could we, now, we asked ourselves, combine our D.O.T. Classifications into 99 sensible units? Did we need more drawers? Fewer?

Since we believe that most students should explore occupational fields rather than specific jobs, we tried to combine the standard D.O.T. classifications into job families. For example, we combined 0-35.22 Biologist, 0-35.28 Zoologist, 0-35.33 Bacteriologist, and 0-35.34 Pharmacologist into a single category 0-35.22 to 0-35.34, Biological Science. Since we did not wish to drop the numerical arrangement of the D.O.T., a few of our categories are unusual, but most form intelligent, related job families. When we were finished, we had 97 categories—two drawers to spare.

We purchased the cabinets but then turned our attention to the next problem. Who would have the time to sort pamphlets and set them up in the new cabinets? Our clerks were already overburdened and so were our counselors. We again turned to the NDEA, Title V-A funds and hired a team of part-time clerks to revamp our filing system. Since we had to reexamine and reclassify each pamphlet in our file, this proved a most auspicious time to throw away outdated materials, and to mark the date of current materials in a conspicuous place for future removal. We also indicated the code number on each item, to minimize further misfiling. This process took a team of four about a week to complete.

At this writing, our reorganization is complete, and we are quite pleased with the results. Students seem to enjoy using the file and can locate material quickly. Being able to remove an entire drawer of materials and carry it over to the work table for use is a real boom; and we find

that under this system very few materials are misfiled.

We believe we have found a most practical and inexpensive way to stimulate and facilitate student use of occupational information. ▲ ▲ ▲

A Vocational Guidance Unit For the Non-College Bound

GEORGE DU BATO
Counselor
Roslyn High School
Roslyn, N. Y.

The following outline has been used for several years by Mr. Du Bato with the non-college bound juniors and seniors. This is the actual working outline.

OUTLINE

- I. General Discussion About Career Planning
- II. What the Job Seeker Must Know
 - A. About Himself
 - B. About Occupations
 - C. About the Employer
 - D. About Job Hunting
 - E. About Job Trends
 - F. About Job Changing
- III. Students Begin Job Campaign

LESSON PLANS

- I. General Discussion About Career Planning
 - A. Importance of job to young men and women
 - B. Why the wise selection of a career is especially important in periods of full employment
 1. The "job-hopper"
 2. The "job-stuck-in-the-mud"
 - C. Four stages in choosing an occupation
 1. Dream or fantasy choice, 6-11
 2. Tentative choice, 11-17
 3. Realistic choice, early adulthood
 4. Ultimate choice

- D. Role of school guidance counselor

II. What the Job Seeker Must Know About Himself

- (A) Personality (B) Interests
(C) Abilities

CLASS ACTIVITIES

1. Unit on personality and the job
2. Administer Kuder Preference Record—Vocational
3. Administer NYSES Interest Check List
4. Administer Otis Test of Mental Ability
5. Administer (where requested) NYSES—GATB
6. Show films and filmstrips

AUDIO-VISUAL AIDS

1. "Choosing Your Occupation," Coronet, 1949—film, 10 minutes
2. "You and Your Mental Abilities," S. for V. E., filmstrip

III. What the Job-Seeker Must Know About Occupations

- A. Breakdown of the different kinds of jobs listed in the "Dictionary of Occupational Titles"
- B. How to make a study of one occupation

CLASS ACTIVITIES

1. Discuss and demonstrate
 - a. Dictionary of Occupational Titles (D.O.T.)
 - b. Guidance office occupational filing system and materials
2. Have students prepare at least one job outline (Hop-pock's "Outline Study of an Occupation"), giving them one week's time in which to complete the assignment
3. Show filmstrips
4. Listen to tape recordings

AUDIO-VISUAL AIDS

1. 11 filmstrips based on occupations listed in D.O.T.
2. Taped recordings made by students from N.Y.C. public schools

IV. What the Job-Seeker Should Know About the Employer

- A. The kind of person he is
- B. What he expects:
1. Aptitude for the job
 2. Competence in the job
 3. Proper attitude toward his job
 4. Ability to get along with his fellow workers

CLASS ACTIVITIES

1. Spend class period discussing the kind of person an employer is, what he looks for, and what he has a right to expect. To highlight discussion, use rating forms used by local companies
2. Invite local personnel director to talk to class about:
 - a. Job opportunities with his company
 - b. What he expects from a worker
 - c. What he advises a high school senior about to enter the labor market

MATERIALS

1. Interviewer's rating form, L.I.L. Company
2. Performance report, L.I.L. Company
3. Student's record—Report to Employers, N. Y. Tel. Co.

V. What the Job-Seeker Should Know About Job-Hunting

- A. Where to look for a job
- B. How to write a letter of application
- C. How to fill out application blanks
- D. How to prepare for an interview
- E. What to do during an interview
- F. What to do after an interview
- G. Why young people fail to get and hold jobs

CLASS ACTIVITIES

1. Teach students how to write a letter of application. Insist that each student write a letter that finally meets the approval of his teacher. As a

test, put two recent newspaper advertisements (one for boys, one for girls) on the board and ask the class to write a letter applying for the job.

2. Have students fill out personal data form. Give them one for practice and one that is to be perfect.
3. Obtain sample application blanks from local companies and have each student complete at least two to submit to his teacher. Discuss individual items on a typical application form.
4. Teacher leads discussion on:
 - a. Sources of jobs
 - b. How to prepare for an interview
 - c. What to do during an interview
 - d. What to do after an interview

MATERIALS

1. Chronicle Occupational Brief 134, "Job-Hunting"
2. N.Y.S.E.S., "Job-Hunting?"
3. N.Y.S.E.S., "How To Begin Working"
4. Help students to determine what the applicant should know about the job and what they should ask the employer (use the "Group Conference Outline" as a basis for this discussion. Each student may be given a copy for his own use).
5. Discuss the different methods of following up an interview: When to telephone. When to write a letter. How to write a follow-up letter, etc. (See "The Follow-up," "Jobs," June, 1955.)
6. Students visit local companies, chosen by them. Wherever possible arrange tour followed by group conference, using "Group Conference Outline" as a guide for the discussion.
7. Use NYSES booklet "Why Young People Fail To Get and Hold Jobs" as a basis for class discussion. Copies may

be obtained from local office of NYSES for each student.

AUDIO-VISUAL AIDS

1. "Finding The Right Job," Coronet, 1949. Film 11 minutes
2. "How To Keep A Job," Coronet, 1949. Film 16 minutes

VI. What the Job-Seeker Should Know About Job Trends

- A. National outlook
- B. Local outlook

CLASS ACTIVITIES

1. Teacher discusses briefly the kinds of entry jobs that most Nassau high school graduates and dropouts take according to the survey made by the Hempstead office of the NYSES (call local office for up-to-date information).
2. Teacher discusses the jobs that are good bets for career hunters. That is, the jobs that are "looking for people" both on a national and local level. For up-to-date information on this topic, the teacher should consult (a) the latest "Occupational Outlook Review" prepared by the U. S. Department of Labor, and (b) the local branch of the NYSES for their list of "surplus jobs."
3. Teacher discusses the follow-up study of recent Roslyn High School graduates, stressing the kinds of jobs obtained, wages paid, etc.
4. Students allowed to read in class and to borrow for a few days, the NYSES booklet "Job Guide For Young Workers, New York City." Excellent source of ideas on entry jobs.
5. Class invites NYSES representative to give a talk on
 - a. National and local job trends
 - b. What employers seek
 - c. How to seek and apply for a job
 - d. Advice to high school seniors

VII. What the Job-Seeker Should Know About Changing Jobs

- A. Good reasons for leaving a job
- B. The best way of leaving a job
- C. How to seek a new job
- D. How to evaluate advantages of new job over old job

CLASS ACTIVITIES

1. One period discussion on above topics

INSTRUCTIONAL MATERIALS

1. "Job Guide For Young Workers," New York City, New York State Department of Labor.
2. "Occupations In Which Most Nassau County High School Dropouts and Graduates Find Their First Jobs," NYSES, Hempstead Office, Feb., 1954.
3. Follow-up study of recent Roslyn High School graduates.
4. Filmstrips, Roslyn High School graduates on the job.
5. Tests
 - a. Kuder Preference Record—Vocational
 - b. NYSES Interest Check List
 - c. Otis, Self-Administering, Higher Form

d. G.A.T.B., NYSES

6. Filmstrip, "You and Your Mental Abilities," Society for Visual Education. Film, "Choosing Your Occupation," Coronet, 1949.
7. "Dictionary of Occupational Titles," U. S. Department of Labor.
8. Filmstrips (11), Vocational Guidance Films.
9. Tape recordings, New York City Board of Education.
10. Outline Study of an Occupation, Hoppock.
11. Rating forms, local companies.
12. "Why Young People Fail To Get And Hold Jobs," NYSES.
13. "Job Hunting," Chronicle Occupational Brief #134.
14. "Job Hunting?," NYSES.
15. "How To Begin Working," NYSES.
16. Senior Check List (Mimeographed Form).
17. Personal Data Sheet (Mimeographed Form).
18. Application Blanks From Local Companies.
19. Group Conference Outline (Mimeographed Form).
20. "The Follow-Up," "Jobs," June, 1955.
21. Job Campaign (Mimeographed Form).

As we read the school reports upon our children, we realize with a sense of relief that can rise to delight that—thank Heaven—nobody is reporting in this fashion upon us.

J. B. PRIESTLEY

If there is anything we wish to change in the child, we should first examine it and see whether it is not something that could better be changed in ourselves.

CARL JUNG

Briefing ★ ★ ★ ★ ★ the JOURNALS

by EMORY J. WESLEY

JOHN PERRY, "When the Boss Interviews," *Personnel*, 37 (July-August, 1960), pp. 67-72.

Experimentation is too rare in management today. Francis Rogers, superintendent of a plant in Newark, New York, struck out on his own rather than follow the procedures prescribed by the book. He planned and conducted interviews with foremen in his plant. He was not a professional at interviewing, but he was pleased at the results of his venture. Ideas and action resulted in the areas of "Materials" and "Planning" and the foremen, generally, were pleased with the results.

After the lapse of a year, Rogers started another round of interviews with foremen but soon discovered that they were not as productive as before. This was because, he decided, not enough time had elapsed. His procedure was altered to the encouragement of his foremen in interviewing workmen in the shops. Here, again, positive results in ideas and morale were obtained.

★ ★ ★

JOHN C. ROMAN, "Will Engineers and Scientists Become Clerks of the Future?" *Balance Sheet*, 42 (November, 1960), p. 129.

"There is evidence that due to the shortage of clerical help many engineers and scientists are doing the work of clerks." Thus scientific training is going to waste. This is costly because "clerical help will generally cost on the average of \$3000 a year as compared to \$6000 a year for beginning engineer or scientist."

A proper balance, therefore, be-

tween educational programs to prepare scientists and programs to prepare clerical and other office workers should be the goal of those responsible for school administration.

★ ★ ★

ALEXANDER FRAZIER, "Needed: A New Vocabulary for Individual Differences," *Elementary School Journal*, 61 (February, 1961), pp. 260-268.

As means of liberating our thinking concerning the care for individual differences from restrictions imposed by antiquated terminology, three ideas are presented.

First, learning is multidimensional. It is highly complex. The old emphasis on the *rate* of learning needs to be replaced by more attention to other attributes of learning such as power and type.

Second, learning is limitless. While some selection must, of course, be made for younger learners, isn't it very likely that in many of our schools the closely graded programs have not served the best interests of many individuals?

Third, learning is personal. "Possessed of an innate drive to learn, everyone strives as he can to learn what he feels he ought to know. The key terms in this statement are *as he can* and *what he feels*."

Levels of instruction, grouping, special provisions, acceleration, and enrichment as means for caring for certain groups of the whole school population are anachronisms that need re-examination in light of what we now understand of the nature of the individual.

Job Futures for Girls in Biology

Job Futures for Girls in Biology is the new seven-page leaflet 35-1961 prepared by the Women's Bureau, U. S. Department of Labor. It is available for five cents from the Superintendent of Documents.

Current Occupational Literature

by GUIDANCE INFORMATION REVIEW SERVICE



MEMBERS of the Guidance Information Review Service Committee are: Wilma Bennett, Edgewood High School, Covina, California; Vera Carlyle, Plymouth High School, Wisconsin; John O. Crites, State University of Iowa; Irene Feltman, Southern Connecticut State College; William E. Hopke, Florida State University; Ralph Kron, Michigan State University; Emil Lubick, City Schools, Long Beach, California; Willa Norris, Michigan State University; Robert O'Hara, Boston College; Richard M. Rundquist, University of Kansas; Ward W. Leis, *Chairman*, Pasadena City Schools, California.

Subject headings have been adapted, with permission of the author, from Occupations Filing Plan, Wilma Bennett, 1958, Sterling Powers Publishing Co., 748 S. Paseo St., Covina, California.

Each item listed has been classified and coded in accordance with the following system:

Type of Publication

- A—Career fiction
- B—Biography

ACCOUNTING

- Accountant*, Wilson, J. R. M., Guidance Centre, Ontario College of Education, May, 1960, 4 pp. Subscription. C-1.
- Cost Accountant*, Careers, 1961, 2 pp. Subscription. E-2.

- C—Occupational monograph
- D—Occupational brief
- E—Occupational abstract
- F—Occupational guide
- G—Job series
- H—Business and industrial descriptive literature
- I—Occupational or industrial descriptive literature
- J—Recruitment literature
- K—Poster or chart
- L—Article or reprint
- M—Community Survey, economic report, job analysis
- N—Other

Recommendation

1. Highly recommended (maximum adherence to NVGA Standards).
2. Recommended (general adherence to NVGA Standards).
3. Useful (while because limited in scope it does not meet NVGA Standards, contains authentic, objective, timely, and helpful information).

Employment Outlook for Accountants, U. S. Government Printing Office, 1960, 4 pp. 5¢. I-1.

Get Ahead in California: Careers for Auditors and Accountants in State Government, California State Personnel Board, April, 1959, 12 pp. Free. J-3.

ADVERTISING

Consider A Chamber of Commerce Career, Education Committee of the American Chamber of Commerce Executives, January, 1961, 12 pp. 10¢. Free to vocational guidance workers. C-1.

AGRICULTURE

Employment Outlook in Agricultural Occupations, U. S. Government Printing Office, 1959, 32 pp. 20¢. I-1.

General Farmer, Chronicle Guidance Service, January, 1961, 4 pp. 35¢; 25¢ to students. D-2.

General Farmer, Chronicle Guidance Service, January, 1961, 1 p. Subscription. K-3.

AGRICULTURE—ANIMAL AND LIVESTOCK FARMING

Cattle Farmer, Careers, 1961, 2 pp. Subscription. E-2.

AGRICULTURE—DAIRY FARMING

Dairy Farmers, Science Research Associates, Inc., 1960, 4 pp. 45¢. D-1.

AGRICULTURE—POULTRY FARMING

Poultrymen, Science Research Associates, 1960, 4 pp. 45¢. D-1.

AGRICULTURE—TRUCK FARMING

Truck Farmer, Careers, 1960, 2 pp. Subscription. E-2.

AIR CONDITIONING AND REFRIGERATING INDUSTRIES

Employment Outlook for Refrigeration and Air Conditioning Mechanics, U. S. Government Printing Office, 1959, 4 pp. 5¢. D-2.

AIR TRANSPORTATION

Air Traffic Controllers, Careers, 1961, 7 pp. Subscription. D-1.

Air Transportation, U. S. Government Printing Office, 1959, 1 p. Free. K-3.

Employment Outlook for Pilots, Stewardesses, Other Air Transport Occupations, U. S. Government Printing Office, 1959, 24 pp. 15¢. I-1.

AIRCRAFT MANUFACTURING INDUSTRY

Employment Outlook in the Aircraft, Missile, and Spacecraft Field, U. S. Government Printing Office, 1959, 11 pp. 10¢. I-1.

APPRENTICESHIPS

Industry, Unions Cooperate in State's Program to Provide Skilled Craftsmen, Careers, 1960, 6 pp. Subscription. L-3.

ARCHITECTURE

Employment Outlook for Architects, 1959, 4 pp. 5¢. D-2.

ART

Cartoonist, Chronicle Guidance Publications, January, 1961, 4 pp. 35¢; 25¢ to students. D-1.

Cartoonist, Chronicle Guidance Publications, January, 1961, 1 p. Subscription. K-3.

Employment Outlook for Commercial Artists, U. S. Government Printing Office, 1959, 3 pp. 5¢. D-3.

Medical Artist (Illustrator), Careers, 1961, 2 pp. Subscription. E-3.

ATHLETICS

Commercial Sports, Science Research Associates, 1960, 4 pp. 45¢. D-2.

AUTOMOBILE INDUSTRY AND SERVICES

Employment Outlook for Automobile Mechanics and Diesel Mechanics, U. S. Government Printing Office, 1959, 6 pp. 10¢. D-2.

BAKERY PRODUCTS INDUSTRY

Employment Outlook in Baking Occupations, U. S. Government Printing Office, 1959, 7 pp. 10¢. I-1.

BARBER SHOP WORK

Pros and Cons of Barbering, Careers, 1960, 2 pp. Subscription. L-3.

BEAUTY SHOP WORK

Beauty Operators, Occupational Research Unit—Michigan Employment Security Commission, revised December, 1960, 19 pp. 25¢. C-1.

- Beauty Operators*, Science Research Associates, Inc., 1960, 4 pp. 45¢. D-2.
- Employment Outlook for Beauty Operators and Barbers*, U. S. Government Printing Office, 1959, 6 pp. 10¢. D-2.
- BUILDING MAINTENANCE AND SERVICE**
- Elevator Operator*, Careers, 1960, 2 pp. Subscription. E-2.
- BUSINESS**
- Administrative and Related Occupations*, Occupational Outlook, U. S. Department of Labor, U. S. Government Printing Office, 1960, 2 pp. 10¢. N-3.
- Credit Workers*, Science Research Associates, 1960, 4 pp. 45¢. D-1.
- Employment Outlook for Purchasing Agents*, Chronicle Guidance Publications, 1960, 3 pp. Subscription. L-2.
- General vs. Specialized Education for Business: The Debate Grows Hotter*, Chronicle Guidance Publications, 1960, 4 pp. Subscription. L-3.
- Young Women Executives*, Quitor, Mary Anne, Mademoiselle, 1960, 4 pp. 25¢. L-3.
- CANNING AND PRESERVING INDUSTRY**
- Cannery Workers*, Science Research Association, 1960, 4 pp. 45¢. D-1.
- CARTOGRAPHY**
- Cartographer*, Chronicle Guidance Publications, 1960, 4 pp. 35¢. D-1.
- Cartographer*, Chronicle Guidance Publications, 1960, 1 p. 65¢. K-3.
- CHEMICAL INDUSTRY**
- Employment Outlook in the Industrial Chemical Industry*, U. S. Government Printing Office, 1959, 9 pp. 10¢. I-1.
- CHEMISTRY**
- Employment Outlook for Chemists*, U. S. Government Printing Office, 1959, 4 pp. 5¢. D-1.
- CHIROPODY**
- Podiatrist*, Chronicle Guidance Publications, 1960, 4 pp. 35¢. D-1.
- Podiatrist*, Chronicle Guidance Publications, 1960, 1 p. 65¢. K-3.
- CHIROPRACTIC**
- The Present Day Doctor of Chiropractic*, Anderson, Dewey, Public Affairs Institute, 1956, 30 pp. 25¢. C-3.
- CIVIL SERVICE**
- Plant Quarantine Inspection*, Careers, 1960, 4 pp. Subscription. L-3.
- CONSERVATION WORK**
- Soil Conservationist*, Chronicle Guidance Publications, 1960, 4 pp. 35¢. D-1.
- Soil Conservationist*, Chronicle Guidance Publications, 1960, 1 p. 65¢. K-3.
- Wildlife Specialist*, Careers, 1960, 8 pp. 25¢ or subscription. D-1.
- CONSTRUCTION INDUSTRY**
- Building Trades—Occupational Outlook*, U. S. Department of Labor, 1960, 4 pp. 10¢. N-2.
- Operating Engineers*, Careers, 1960, 8 pp. 25¢ or subscription. D-1.
- Roofer*, Careers, 1960, 2 pp. Subscription. E-2.
- CONSTRUCTION INDUSTRY—BRICKLAYING AND STONEMASONRY**
- Bricklayer*, Careers, 1958, 4 pp. Subscription. L-2.
- CONSTRUCTION INDUSTRY—CEMENT WORK**
- Cement Finisher*, Careers, 1960, 2 pp. Subscription. E-1.
- Job of a Cement Mason*, Careers, 1960, 2 pp. Subscription. L-3.
- CONSTRUCTION INDUSTRY—PAINTING AND PAPERHANGING**
- Painters and Paperhangers*, Science Research Associates, 1960, 4 pp. 45¢. D-1.
- CRIMINOLOGY**
- F.B.I. Agents*, Science Research Associates, 1960, 4 pp. 45¢. D-1.
- DATA PROCESSING WORK**
- Computer Occupations*, Michigan Employment Security Commission, 1960, 24 pp. 25¢. G-1.

DENTISTRY

- Dentistry*, American Dental Association, 1960, 4 pp. Free. D-3.
Dentistry as a Career, Belleau, Wilfred E., Park Publishing House, 1961, 27 pp. 75¢. C-1.
Dentists, Science Research Associates, 1960, 4 pp. 45¢. D-1.
Wanted—More Women to Become Dentists, Careers, 1960, 4 pp. Subscription. L-3.

DIESEL ENGINE WORK

- Diesel Mechanic*, Vernald F. Group, Personnel Services, Inc., February, 1961, 6 pp. 50¢. E-2.
Today's Diesel Man, Walter Rudolph, Chronicle Guidance Publications, Inc., April, 1961, 1 p. Subscription. L-3.

ELECTRONICS

- The Field of Electronics*, Agnes W. Mitchell, Chronicle Guidance Publications, Inc., April, 1961, 4 pp. Subscription. L-3.

ENGINEERING

- Demand Forces Salaries Up Again*, R. E. Fremed (Ed.), Chronicle Publications Inc., February, 1961, 4 pp. 15¢ or subscription. L-1.
Engineering, Edward H. Robie, Bellman Publishing Co., 1959 (Rev.), 36 pp. \$1.00. C-1.
Material Handling Engineer, Careers, 1961, 1 p. Subscription. E-2.
Mechanical Engineer, Careers, 1961, 1 p. Subscription. E-2.
Women in Engineering, Alice K. Leopold, Careers, August, 1959, 6 pp. Subscription. L-2.

ENGINEERING, CIVIL

- Something About a Bridge*, Louise Horton, Careers, May, 1960, 4 pp. Subscription. L-3.

FINANCE

- A Direct Line to the Bank*, Peggy Norton Ralston, Chronicle Guidance Publications, Inc., February, 1961, 4 pp. Subscription. L-2.
Fund-Raiser, Chronicle Guidance Publications, Inc., 1961, 4 pp. 35¢. D-1.
Professional Fund Raiser, Chronicle Guidance Publications, Inc., April, 1961, 1 p. Subscription. K-1.

FIRE DEPARTMENT WORK

- Employment Outlook for Policemen-Firemen*, Bureau of Labor Statistics, U. S. Department of Labor. L-1.

FORESTRY

- Forester*, Department of Employment, State of California, June, 1959, 6 pp. None given. F-2.

FOUNDRY WORK

- Foundry Workers*, Science Research Associates, Inc., 1961, 4 pp. 45¢. D-1.
Molder (foundry), Department of Employment, State of California, February, 1961 (Rev.), 3 pp. None given. F-2.

GARMENT INDUSTRY

- Clothing Manufacturing Workers*, Science Research Associates, Inc., 1961, 4 pp. 45¢. D-1.
Drapery Seamstress, Department of Employment, State of California, 1959 (Rev.), 3 pp. None given. F-2.
Tailor, Department of Employment, State of California, October, 1958, 3 pp. None given. F-2.

HAT AND CAP INDUSTRY

- Hat Manufacturing Workers*, Science Research Associates, Inc., 1961, 4 pp. 45¢. D-1.

HOSPITAL WORK

- November, 1959, 5 pp. None given. F-1.
November, 1959, 5 pp. None given. F-1.

METEOROLOGY

- Meteorologist*, California Department of Employment. F-2.

MODELING

- Model*, California Department of Employment. F-2.

MOTOR TRANSPORTATION

Log Truck Driver, California Department of Employment. F-3.

Long Haul Truck Driver, California Department of Employment. F-3.

NEWSPAPER WORK

Copy Reader, California Department of Employment. F-2.

OFFICE WORK

Employment Outlook for Secretaries, Stenographers, and Typists, Women's Bureau, U. S. Department of Labor, Superintendent of Documents, 1960, 5 pp. 5¢. L-1.

Employment Outlook—Office Machine Operators and Bookkeepers, Superintendent of Documents, 1960, 6 pp. 10¢. L-1.

OFFICE WORK—SECRETARY

Report on a Good Buy, Peggy Norton Rollason, Chronicle Guidance Publications, January, 1961, 3 pp. Subscription Service, L-3.

Secretary, H. J. Owens, The Guidance Centre, May, 1960, 4 pp. C-1.

OPTICAL GOODS INDUSTRY

Employment Outlook for Dispensing Opticians and Optical Laboratory Mechanics, Superintendent of Documents, 1959, 4 pp. 5¢. L-1.

OSTEOPATHY

Employment Outlook for Osteopathic Physicians, Superintendent of Documents, 1959, 3 pp. 5¢. L-1.

PAPER AND PULP INDUSTRY

Employment Outlook in Paper and Allied Products Industry, Bureau of Labor Statistics, U. S. Department of Labor. L-1.

PHARMACY

Employment Outlook for Pharmacists, Bureau of Labor Statistics, U. S. Department of Labor. L-1.

POWER PLANT WORK

Stationary Engineer, Careers. D-1.

PSYCHOLOGICAL WORK

Employment Outlook for Psychologists, U. S. Department of Labor, Bureau of Labor Statistics. 1960. 4 pp. 5¢. L-2.

PUBLIC OFFICE

Political Workers, Science Research Associates, subscription. D-2.

RADIO AND TELEVISION

Employment Outlook in Radio and Television Broadcasting Occupations, Bureau of Labor Statistics, U. S. Department of Labor. L-1.

RAILROAD WORK

Employment Outlook in Railroad Occupations, Bureau of Labor Statistics, U. S. Department of Labor. L-1.

RELIGIOUS WORK

Career as Cantor, B'nai B'rith Vocational Services. 1960. 8 pp. 35¢. D-1.

Careers in the Rabbinate, B'nai B'rith Vocational Service. 1960. 12 pp. 35¢. D-1.

Careers in Synagogue and Temple Administration, B'nai B'rith Vocational Service. 1960. 8 pp. 35¢. D-1.

The Clergy-Protestant Clergymen, U. S. Department of Labor. 1960. 4 pp. 5¢. L-1.

The Clergy-Rabbis, U. S. Department of Labor. 1960. 3 pp. 5¢. L-3.

The Clergy-Roman Catholic Priests, U. S. Department of Labor. 1960. 3 pp. 5¢. L-2.

RESTAURANT WORK

Restaurant Occupations, Michigan Employment Security Commission, 1960, 24 pp. 25¢. G-1.

School Lunch Director, Careers, 1960, 2 pp. Subscription. E-1.

RIGGER

Rigger, Department of Employment, State of California. 1958. 4 pp. Free. F-2.

SCIENTIFIC WORK

Agronomist, Department of Employment, State of California, 1958. 5 pp. Free. F-2.

- Careers in Science at the National Bureau of Standards*, National Bureau of Standards, 1959. 30 pp. Free. J-1.
Oceanographer, Department of Employment, State of California, 1960. 4 pp. Free. F-1.
Science and Your Career, U. S. Department of Labor, 1960. 9 pp. Free. F-1.

SCIENTIFIC WORK—BIOLOGICAL SCIENCES

- Employment Outlook for Biological Scientists*, U. S. Department of Labor, 1959. 8 pp. 10¢. L-1.

SCIENTIFIC WORK—PHYSICAL SCIENCES

- Employment Outlook in the Atomic Energy Field*, U. S. Department of Labor, 1960. 11 pp. 10¢. L-1.
Employment Outlook for Geologists, Geophysicists, Meteorologists, U. S. Department of Labor, 1959. 11 pp. 10¢. L-1.
Employment Outlook for Physicists, U. S. Department of Labor, 1959. 4 pp. 5¢. L-2.
Geologist, Department of Employment, State of California, 1959. 6 pp. Free. F-2.
Physical and Earth Science Occupations, U. S. Department of Labor, 1960. 3 pp. L-3.
Physicist, Department of Employment, State of California, 1959. 6 pp. Free. F-1.
Should You Be a Physicist? Compton, Arthur H., New York Life Insurance Company, 1960. 11 pp. Free. L-2.

SELLING

- Employment Outlook in Sales Occupations*, U. S. Department of Labor, 1960. 14 pp. 15¢. L-1.
Grocery Product Salesman, Department of Employment, State of California, 1961. 5 pp. Free. F-2.
Manufacturer's Representative, Careers, 1961. 8 pp. Subscription Service. D-1.

SKILLED WORKERS AND CRAFTSMEN

- Skilled Workers*, Occupational Outlook Service, 1959-1960 Series, 4 pp. Subscription Service. D-1.

SLAUGHTERING AND MEAT PACKING INDUSTRY

- Meat Cutter Apprentice; Meat Jobber Apprentice*, Department of Employment, State of California, 1959. 4 pp. Free. F-2.
Meat Cutter Apprentice, Department of Employment, State of California, 1959. 2 pp. Free. F-2.
Meat Packing Workers, Science Research Associates, 1960. 4 pp. 45¢. D-1.

SOCIAL SCIENCES

- Employment Outlook for Anthropologists, Economists, Historians, Political Scientists, Sociologists*, U. S. Department of Labor, 1960. 13 pp. 15¢. L-2.

SOCIAL SCIENCES—ECONOMICS

- Economist*, Department of Employment, State of California, 1960. 6 pp. Free. F-2.

SOCIAL WORK

- California Calling: Psychiatric Social Workers*, California State Personnel Board, 1959. 6 pp., (12 pp. inserts). Free. J-3.
Case Worker, Department of Employment, State of California, 1961. 6 pp. Free. F-2.
Employment Outlook for Social Workers, U. S. Department of Labor, 1960. 5 pp. 5¢. L-2.
Probation and Parole Officer, Department of Employment, State of California, 1959. 7 pp. Free. F-2.

STATISTICAL WORK

- Statistician*, Careers, 1959. 1 p. Subscription Service. E-1.

STOCK CLERK

- Stock Clerk*, Department of Employment, State of California, 1959. 2 pp. Free. F-2.

SUCCESS ON THE JOB

Success is not spelled with a \$, Frank Horr, Careers, 1960. 1 pp. Subscription Service. K-3.

Those Most Likely to Succeed . . . Know How to Plan A Career! Chronicle Guidance Publications, Inc., January, 1961, 1 p. Subscription Service. K-3.

Who, Me? I Don't Need No Home-Work, Frank Horr, Careers, 1960. 1 p. Subscription Service. K-3.

SWIMMING POOL SERVICES

Swimming Pool Service Technician, Department of Employment, State of California, 1960. 3 pp. Free. F-2.

TEACHING

Employment Outlook for Teachers; School Counselors, U. S. Department of Labor, 1960. 12 pp. 15¢. L-2.

TEACHING—COLLEGE, JUNIOR COLLEGE, AND INDUSTRY

Teachers, Junior College, Department of Employment, State of California, 1959. 4 pp. Free. F-2.

TEACHING—ELEMENTARY SCHOOL

Teacher, Elementary (public schools), Department of Employment, State of California, 1959. 5 pp. Free. F-2.

TEACHING—KINDERGARTEN AND NURSERY SCHOOL

Nursery School Teacher, Department of Employment, State of California, 1960. 6 pp. Free. F-1.

TEACHING—PHYSICAL EDUCATION

Coach, Department of Employment, State of California, 1960. 4 pp. Free. F-2.

TELEPHONE AND TELEGRAPH INDUSTRY

The Seaway's My Beat, Telephone Review, Reprint. Chronicle Guidance Publications, Inc., November, 1959. 4 pp. Subscription Service. B-2.

Telephone Installer, Careers, 1960. 2 pp. Subscription. E-2.

THEATRICAL WORK

Jobs in the Performing Arts, Rudolph V. Green, Science Research Associates, 1960. 36 pp. Subscription Service. G-1.

Jobs in the Performing Arts, Science Research Associates, 1960. 1 p. Subscription Service. K-1.

Theater Managers, Science Research Associates, 1960, 4 pp. 45¢. D-2.

Usher, Careers, 1960. 2 pp. Subscription. E-2.

TOOL AND DIE MAKING

Tool and Die Maker, Department of Employment, State of California, 1960. 3 pp. Free. F-2.

Tool and Die Maker, Department of Labor, Canada, January, 1959. 24 pp. 10¢. C-1.

TRANSPORTATION

Traffic Manager, Michigan Employment Security Commission, 1960. 16 pp. 25¢. C-1.

Traffic Manager, Chronicle Guidance Publications, 1960. 4 pp. 35¢. D-1.

Traffic Manager, Chronicle Guidance Publications, 1960. 1 p. 65¢. K-3.

Traffic Manager, A. F. Downey, Guidance Center, 1959. 4 pp. Subscription Service. C-3.

Travel Agency Workers, Science Research Associates, 1960. 4 pp. 45¢. D-1.

UNDERTAKING

Funeral Service as a Career, Wilfred E. Belleau, Park Publishing House, 1960. 26 pp. 75¢. C-1.

UNSKILLED WORKER

Unskilled Workers, Science Research Associates, 1960. 4 pp. 45¢. D-2.

VETERINARY MEDICINE

Employment Outlook for Veterinarians, U. S. Department of Labor, 1960. 4 pp. 5¢. L-2.

WATER TRANSPORTATION

Merchant Seamen, Science Research Associates, 1960. 4 pp. 45¢. D-2.

WELDING AND FLAME CUTTING

Employment Outlook for Welders, Oxygen Cutters, Boilermakers, U. S. Department of Labor, 1960. 8 pp. 10¢. L-2.

WOODWORKING

Career Possibilities for those Interested in Woodworking, Careers. No date. 1 p. Subscription Service. K-2.

WRITING

Careers in Technical Writing, Juvenal L. Angel, World Trade Academy Press, 1960. 21 pp. \$1.25. C-1.

Technical Writers, Science Research Associates, Inc. 1960. 4 pp. 45¢. D-1.

X-RAY TECHNOLOGY

X-Ray Technicians, Science Research Associates, 1959. 4 pp. 45¢. D-1.

YOUTH WORK

Camp Counselors, Science Research Associates, 1960. 4 pp. 45¢. D-1.

Career Possibilities for Those Interested in Young People, Careers, 1960. 1 p. Subscription. K-3.

Current Occupational Literature—Supplementary

SUCCESS ON THE JOB

How to Study, Emil S. McCarty, Chronicle Guidance Publications, Inc. April, 1960. 1 p. Subscription Service. L-3.

TRAINING AGENCIES

Getting Ready for College, N.E.A. Journal, Reprint. Careers. 1959. 4 pp. 35 for \$1.00. L-3.

If College Isn't Your Next Move, Don't Overlook Other Choices, Youngquist, Science Research Associates, 1960. 1 p. Subscription Service. K-1.

The Cost of Attending College, Ernest V. Hollis, Careers, 1958. 4 pp. Subscription Service. L-3.

Why Stay in School, Sun Life Assurance Company of Canada, October, 1959. 6 pp. Free. N-2.

TRAINING AGENCIES—COLLEGES AND UNIVERSITIES

Academic Admission Requirements and Costs in Accredited Liberal Arts Colleges, Chronicle Guidance Publications, Inc., February, 1960. 1 p. Subscription Service. N-3.

Catholic Colleges and Universities 1959-1960 Directory, Rose Mary Curtin. September, 1959. 135 pp. \$1.00. N-1.

How to Discover a College, Paul Woodring, Alumnae Advisory Center, 1960. 4 pp. 25¢. N-3.

Questions and Answers Regarding College Admissions, College Admissions Center. May, 1959. 5 pp. Free. N-2.

TRAINING AGENCIES—TRADE AND TECHNICAL SCHOOLS

What About Trade and Industrial Schools? Sun Life Assurance Company of Canada. November, 1959. 8 pp. Free. N-3.

TRENDS IN EMPLOYMENT

The Best Jobs—Now and the Years Ahead, Careers, 1960. 6 pp. Subscription. L-2.

Advice to Young Americans, Careers, 1960. 4 pp. Subscription. L-3.

Combing the Campus for Talent, Chronicle Guidance Publications, 1960. 2 pp. Subscription. L-3.

Publishers' Index

Alumnae Advisory Center, 541 Madison, New York 22, New York.

Alumni Publications, 10 Columbus Circle, New York 19, New York.

American College Personnel Association, 1605 New Hampshire Ave., N.W., Washington 9, D. C.

American Council of Education, Washington, D. C.

American Dental Association, 222 E. Superior Street, Chicago 11, Illinois.

American Foundation for the Blind, New York 11, New York.

American Home Economics Association, 1600 Twentieth St., N.W., Washington 9, D. C.

American Public Welfare Association, 1313 East 60th St., Chicago 37, Illinois.

American School Counselor Association, 1605 New Hampshire Ave., N.W., Washington 9, D. C.
 Atomic Industrial Forum, Inc., 3 East 54th St., New York 22, New York.
 Biophysics Society, Box 3054, Columbus, Ohio.
 B'Nai B'Brith Vocational Service, 1640 Rhode Island Ave., Washington 6, D. C.
 R. R. Bowker Company, 62 W. 45th St., New York 36, New York.
 Boys' Clubs of America, 381 Fourth Avenue, New York 16, New York.
 Careers, Largo, Florida.
 Changing Times, The Kiplinger Magazine, 1729 H Street, N.W., Washington 6, D. C.
 Chronicle Guidance Publications, Inc., Moravia, New York.
 Cincinnati College of Embalming, 3203 Rending Rd., Cincinnati 29, Ohio.
 College Admissions Center, 2300 Sherman Road, Northbrook, Illinois.
 Corning Glass Works Foundation, Houghton Park, New York.
 Department of Employment, State of California, Sacramento, California.
 General Electric Company, 3198 Chestnut St., Philadelphia 4, Pa.
 Guidance Center, Toronto 5, Canada.
 Lovejoy's, Times Tower Building, Times Square, 1475 Broadway, New York 36, N. Y.
 Mademoiselle, 575 Madison Avenue, New York 22, New York.
 Manufacturing Chemists' Association, 1825 Connecticut Ave., N.W., Washington 9, D. C.
 Michigan Employment Security Commission, 7310 Woodward Ave., Detroit 2, Michigan.
 Mississippi State University, Not Given.
 National Art Education Association, Washington, D. C.
 National Bureau of Standards, Washington, D. C.
 National Vocational Guidance Association, 1605 New Hampshire Ave., N.W., Washington 9, D. C.
 New York Life Insurance Company, 51 Madison Avenue, New York 10, New York.
 Park Publishing House, 4141 W. Vliet Street, Milwaukee 8, Wisconsin.
 Personnel Services, Inc., Jaffrey, New Hampshire.
 Public Affairs Institute, 312 Pennsylvania Ave., S.E., Washington, D. C.
 Queen's Printer and Controller of Stationery, Ottawa, Canada.
 Richard Rosen Press, Inc., New York 10, New York.
 Science Research Associates, Inc., 259 E. Erie St., Chicago 11, Illinois.
 St. Francis College, Brooklyn 31, New York.
 Street & Smith Publications, Inc., 541 Madison Ave., New York 22, New York.
 Sun Life, 218 Life Bldg., Montreal, Quebec, Canada.
 Superintendent of Documents, Washington 25, D. C.
 The Guidance Centre, Ontario College of Education, University of Toronto, 371 Bloor St., West, Toronto 5, Ontario, Canada.
 United States Department of Labor, Bureau of Labor Statistics, Washington 25, D. C.
 U. S. Government Printing Office, Washington, D. C.
 World Trade Academy Press, 50 East 42nd St., New York 17, New York.

The entire issue of *Daedalus*, Fall, 1961, is on *Excellence and Leadership*. With contributions from leading authorities, this book-length discussion of a topic which is of great concern to counselors, is sure to be an important reference for some time to come.

Occupational Literature Published by Professional Societies and Trade Associations

Harold F. and Lois R. Mathis

At least 80 national professional societies and 40 national trade associations publish booklets, leaflets, and posters related to vocational guidance. However, authors of textbooks and articles on vocational guidance have almost completely ignored these publications. The general criticism is that too many of them are "recruitment advertisements."

In order to check the validity of this criticism, data were compiled from the *NVGA Bibliography of Current Occupational Literature, 1959 Revision*¹ and the "Current Occupational Literature" sections of the *Vocational Guidance Quarterly*, which have appeared since the *NVGA Bibliography* was compiled and through the Spring 1961 issue. Hereafter, these bibliographies will be referred to as the *NVGA Lists*. These lists contain 2,661 entries.

Publishers of items in the *NVGA Lists* were divided into three categories:

- Professional societies
- Trade associations
- Others

The number of publications in each NVGA classification for each category of publishers were tabulated and are shown in TABLE I. Six publications were not included be-

cause the NVGA classification was not complete.

It should be noted that 62, or 25.7 per cent, of the professional society publications, 16, or 20.3 per cent, of the trade association publications, and 118, or only 5.1 per cent, of the other publications are classified J—Recruitment Literature. Thus it appears that the criticism is valid.

It is generally agreed that publications which are classified D—Occupational Briefs are very useful for counselors and students. Only nine, or 3.7 per cent, of the professional society publications and one, or 1.3 per cent, of the trade association publications have this classification; while 699, or 29.9 per cent, of the other publications have this classification.

The writers have found that the *NVGA Lists* contain only about one-third of the occupational literature published by professional societies and trade associations. In our opinion, the items listed are a representative sample of all occupational literature available from these organizations.

If one wishes to obtain literature on a professional or trade from an appropriate professional society or trade association, the *World Almanac*² is a convenient reference for finding the names of officers and addresses of organizations. It has been our experience that about 75 per cent of these organi-

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TABLE I
Number of Items in Each Classification in NVGA Lists

| <i>Classification</i> | <i>Prof. Soc.</i> | <i>Trade Assn</i> | <i>Others</i> | <i>Classification</i> | <i>Prof. Soc.</i> | <i>Trade Assn.</i> | <i>Others</i> |
|--------------------------------------|-----------------------|------------------------|---------------|---|-----------------------|------------------------|---------------|
| A. Career fiction | | | | H. Business and industrial descriptive literature | | | |
| 1 | 0 | 0 | 2 | 1 | 0 | 6 | 16 |
| 2 | 0 | 0 | 8 | 2 | 4 | 4 | 20 |
| 3 | 1 | 0 | 12 | 3 | 0 | 3 | 11 |
| B. Biography | | | | I. Occupational or industrial descriptive literature | | | |
| 1 | 0 | 0 | 0 | 1 | 1 | 1 | 7 |
| 2 | 0 | 0 | 2 | 2 | 1 | 3 | 6 |
| 3 | 0 | 1 | 9 | 3 | 1 | 1 | 5 |
| C. Occupational monograph | | | | J. Recruitment literature | | | |
| 1 | 10 | 1 | 97 | 1 | 2 | 0 | 2 |
| 2 | 4 | 3 | 57 | 2 | 21 | 7 | 22 |
| 3 | 0 | 0 | 6 | 3 | 39 | 9 | 94 |
| D. Occupational brief | | | | K. Poster or chart | | | |
| 1 | 4 | 0 | 281 | 1 | 1 | 0 | 20 |
| 2 | 5 | 1 | 348 | 2 | 4 | 0 | 70 |
| 3 | 0 | 0 | 70 | 3 | 5 | 1 | 175 |
| E. Occupational abstract | | | | L. Article or reprint | | | |
| 1 | 1 | 0 | 53 | 1 | 3 | 0 | 38 |
| 2 | 3 | 0 | 53 | 2 | 4 | 2 | 99 |
| 3 | 1 | 3 | 22 | 3 | 15 | 3 | 255 |
| F. Occupational guide | | | | M. Community survey, eco- nomic report, job analysis | | | |
| 1 | 2 | 0 | 20 | 1 | 6 | 1 | 10 |
| 2 | 6 | 2 | 34 | 2 | 1 | 0 | 9 |
| 3 | 6 | 4 | 27 | 3 | 1 | 1 | 3 |
| G. Job Series | | | | N. Other | | | |
| 1 | 6 | 0 | 32 | 1 | 13 | 4 | 50 |
| 2 | 3 | 2 | 27 | 2 | 16 | 1 | 68 |
| 3 | 0 | 1 | 12 | 3 | 51 | 14 | 183 |
| Totals by recommendation | <i>Prof. Soc.</i> | <i>Trade Assn.</i> | <i>Others</i> | | | | |
| | 241 | 79 | 2335 | | | | |
| 1. Highly recommended | 49 (20.3%) | 13 (16.5%) | 628 (26.9%) | | | | |
| 2. Recommended | 72 (29.9%) | 25 (31.6%) | 823 (35.2%) | | | | |
| 3. Useful | 120 (49.8%) | 41 (51.9%) | 884 (37.9%) | | | | |

zations will reply. About half of those replying will provide useful information. Generally letters are answered very promptly.

Some interesting data on this subject were obtained in a study by Kuntz and Jetton,³ in which 706 certified school counselors in Texas, Missouri, Arkansas, and Oklahoma rated the relative usefulness of various sources of occupational information. Fifty-two sources were listed. Materials from professional societies ranked seventh in usefulness and twelfth in use. The only reference to trade associations is to the National Association of Manu-

facturers' Vocational Guidance Pamphlets, which ranked fifteenth in usefulness and tenth in use.

¹ NVGA *Bibliography of Current Occupational Literature, 1959 Revision*, Guidance Information Review Service Committee (Washington, D. C.: National Vocational Guidance Association, 1959).

² *The World Almanac* (New York: New York World-Telegram, published yearly).

³ James E. Kuntz and Clyde T. Jetton, "Use and Appraisal of Occupational Literature by Secondary School Counselors," *Personnel and Guidance Journal*, XXXVII, No. 6 (February, 1959), 441-443.

Revised Epilepsy Interviewing Guide

The Bureau of Employment Security of the U. S. Department of Labor recently published a revised edition of the interviewing guide on epilepsy.

Revision of the guide on epilepsy was undertaken primarily in order to emphasize the employability of persons whose seizures have been medically controlled and to present the most enlightened approach to their employment. In this way, the guide may prove a helpful tool to those engaged in helping epileptics overcome prejudice and misinformation which deter their employment.

The new guide retains the established format of the *Interviewing Guides for Specific Disabilities*, having three principal sections: (1) Description of Disease; (2) Evaluation of Work Capacity; and (3) Cooperating Agencies. A section for definitions, generally included in other guides of the series, was not prepared for this guide, because virtually all terms relating to the disease which appear in the guide are familiar to most people.

Copies of the guide may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at 5 cents per copy.

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